



PERFORMANCE ELECTRONICS

ENGINE MANAGEMENT SYSTEMS

WIDEBAND AIR/FUEL CONTROLLERS

WATER/METHANOL INJECTION

FUEL DELIVERY COMPONENTS

PERFORMANCE SENSORS

IGNITION COMPONENTS

PERFORMANCE GAUGES

DATA LOGGERS

2016/2017 MASTER CATALOG



Engineered to Outperform

We don't just make performance electronics, we use them ourselves. We have a passion for making electronics and performance products that are easier to use and easy on your wallet, so more racers have access to leading edge technology. Whether you race on four wheels or two, at the track or in the dirt, sand, salt, snow or water, helping you go faster, set records and win is what inspires us.

Constant Innovation:

AEM Electronics takes pride in delivering the finest engineering, highest quality and best value the industry has to offer. The proof is in every product we make.

Our Infinity ECU delivers all of the features of high-end Motorsports engine management systems on state-of-the-art hardware. It's powerful enough for professional race teams and affordable enough for privateer racers. You will find the Infinity everywhere; on every Rallycross Lites car, SCCA TA2 car, record-setting drag cars, championship road race cars, championship off-road vehicles, championship drift cars and more.

AEM was the first company to incorporate a gauge interface with a wideband air/fuel sensor controller, and make the technology affordable for every racer. Our new X-Series Wideband UEGO Air/Fuel Gauge features patent-pending X-Digital

technology, and was independently tested to be the fastest responding AFR device among major competitors, allowing tuners and engine builders to maximize both the power and safety of an engine.

In 2007, we introduced affordable water/methanol injection for forced induction vehicles. We redesigned this system with improved components and it can now be used on forced induction racecars at all boost levels or high compression naturally aspirated vehicles. We challenge anyone to find a more comprehensive system at its price point.

And there's more. Our High Flow in-tank and inline fuel pumps and data loggers cost roughly half of the competition's offerings, our ignition solutions eliminate additional hardware (and dollars spent) to deliver the spark energy you need, and our new X-Series Digital Gauges combine superior functionality with striking good looks. We have, and will continue to develop and make reliable products that help you achieve your goals.

Critically Reviewed:

Our products are repeatedly put to the test in independent reviews. The results prove that our products are engineered to outperform the competition. You can see them for yourself in the Reviews tab in the product sections of our website.

AEM's Vision:

Our goal is to be the top competitor in performance electronics, and we will accomplish this goal through product innovation, product integrity, being a price/value leader and by putting our customers first. If you ever want to tell us how we are doing, contact us. We will listen. Your faith in our products and critical feedback ensures that we will achieve our Vision.



CHAMPION

2014 RX Lites Champion Kevin Eriksson. Every GRC Lites, FIA RX Lites and Scandinavian Rallycross Supercar Lites racecar relies on an Infinity ECU for powerful, reliable engine performance.

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Certain AEM Performance Electronics products may be used solely on vehicles used in sanctioned competition which may never be used upon a public road or highway, unless permitted by specific regulatory exemption .

It is the responsibility of the installer and/or user of this product to ensure that it is used in compliance with all applicable laws and regulations. If this product was purchased in error, do not install and/or use it. The purchaser must arrange to return the product(s) for a full refund.

This policy only applies to installers and/or users who are located in the united states, however customers who reside in other countries should act in accordance with their local laws and regulations.



All AEM products with this designation feature this icon on their respective pages in this catalog.



ATI Performance Products' Infinity-tuned NHRA Drag Pak Challenger. 9.31 @ 144 MPH, 3500 lbs. per NHRA class regulations.



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NEW PRODUCTS



X-Series Wideband Technology— The Fastest Responding Wideband

X-Series Widebands are built upon unique, patent pending X-Digital technology that makes them the fastest responding wideband air/fuel ratio sensor controllers.

See page 38 for more info.



X-Series Digital Gauges

X-Series Digital gauges feature striking looks with a 33% larger center display, a programmable 3 or 4 digit readout, and slim design that makes them easier to mount.

See page 48 for more information.



AEMdata Video Overlay

AEMdata's new video encoding feature allows users to import 3rd party video, combine it with live logged data via user customizable gauges and graphic images and then export the final video in full HD resolution. *See page 6 for more information.*



Infinity Series 3

The ideal engine management solution for basic crate engines, marine engines and more. *See page 9 for more information.*



Infinity Engine Harness Solutions

Plug & Play engine harnesses and adapter harnesses for GM LS and Ford Coyote engines, and Universal Core Harnesses for 4-, 6- or 8-cylinder engines that allow you to quickly assemble a custom harness for your engine. *See page 17 for more information.*



Infinity European Plug & Play Harnesses

Plug & Play wiring harnesses for Porsche 997.1 & 996, BMW E46 M3 and VW Golf/Jetta MKIV 1.8T.



Infinity for Marine

Customized software tailored specifically for marine applications. See page 19 for more information.



Infinity Plug & Play for 2016 Polaris RZR XP Turbo

Plug & Play system for the new RZR XP Turbo that supports the factory Drive-by-Wire, injectors, boost control solenoid and AWD system.



Flex Fuel 3-in-1 Failsafe Gauge

The Flex Fuel Wideband Failsafe Gauge is now available for vehicles using ethanol and ethanol blended gasolines. It allows users to monitor ethanol content, AFR and boost or vacuum and set a failsafe strategy if AFR values become too lean or too rich. An internal data logger is included. See page 41 for more information.



380lph High Flow Inline Fuel Pump

AEM's 380lph High Flow, High Pressure Fuel Pump is capable of supporting over 1,200 HP normally aspirated and a whopping 860 HP at 30 psi boost! It is packaged in the popular "O44" style envelope for easy installation. See page 55 for more information.



320lph In-Tank, High-Flow E85 Direct Fit Fuel Pumps

New compact 65mm designs with and without hangers are designed for direct fit in many popular vehicles. See page 59 for information and 62 for applications.



20 & 30 Amp Relay Kits

AEM has released a 20-Amp Relay Kit for fuel pumps and 30-Amp Relay Kit for other auxiliary electrical accessories. These kits ensure that electric powered accessories receive the correct current and voltage to perform at their rated performance numbers. See page 62 for part numbers.

AEMdata Analysis Software

Powerful, Fully Customizable & Includes Video Encoding for Overlays!

AEMdata analysis software is a custom data analysis package for the Infinity ECU, Series 2 EMS, EMS-4, AQ-1 Data Logger, Water/Methanol, Wideband and Flex Fuel Failsafe Gauges. It features advanced graphics and a user-friendly interface. It allows the user to review and playback vehicle, driver or engine data and overlay this data using charts, dash displays, gauges, or custom displays that you can create. High-speed logging is saved to a file internally or via PC connection.



Customizable Interface: Quickly design a workspace of your own or choose from one of our templates. From the layout interface to the gauge styles, it's your call! Users can also create tabs to data for quick reference and store them for future reference.

AEMdata Features:

- > “Drag & Drop” channel feature
- > User definable alarms with color changing traces
- > Smart data organization
- > User-defined maths channels
- > Channel statistics
- > User-defined reports
- > Log playback mode
- > Circuit or stage modes
- > Multi-lane log trace
- > Multiple channels per lane
- > Track mapping
- > Unlimited map overlays
- > Lap/sector analysis
- > Time/distance plots
- > Scatter plots
- > Data export via .csv, Matlab, etc.

Create Video Files with Overlays!



AEMdata's new video encoding feature allows users to import 3rd party video, combine it with live logged data via user customizable gauges and graphic images and then export the final video in full HD resolution. Incorporating and synchronizing video from an on-board or other 3rd party camera with logged data lets viewers visualize data more than ever before by connecting it with what the driver experienced on the track. With the addition of this new feature, users can create more compelling videos by adding custom gauges to the on screen display and share their videos with customers, sponsors and on social media sites. Users can add and fully customize the following displays:

- > Round Gauges
- > Vertical & Horizontal Bar graphs
- > Text displays
- > Images
- > BitMask displays
- > Radar (2D & 3D) graphs
- > Track Maps

NEW Drag Race AEMdata Template for AQ-1 Data Logger!

The Ultimate Sportsman Set Up for the Beginning Data Logger

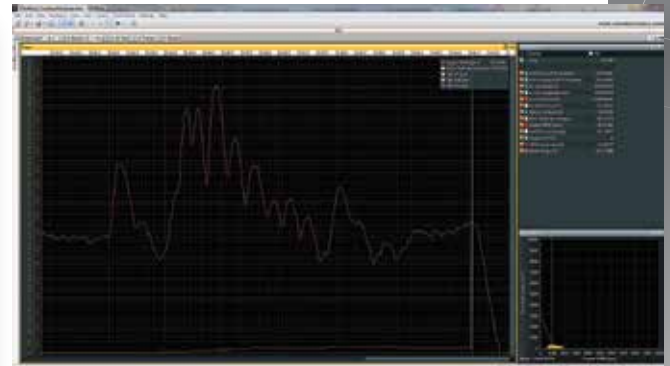
AEM's "Drag Race" set up file for its AQ-1 Data Logger allows users to quickly begin using their AQ-1 with virtually no setup required. By installing pressure, temperature and other sensors for popularly logged parameters into pre-determined inputs, the "Drag Race" set up software allows you to start logging right away with no need to calibrate any sensors. A downloadable AEMdata analysis "Drag Race" template includes these channels in a pre-defined template so you can start viewing data right away. All input channels remain custom configurable, so any changes you may want to make in the future can be accommodated.



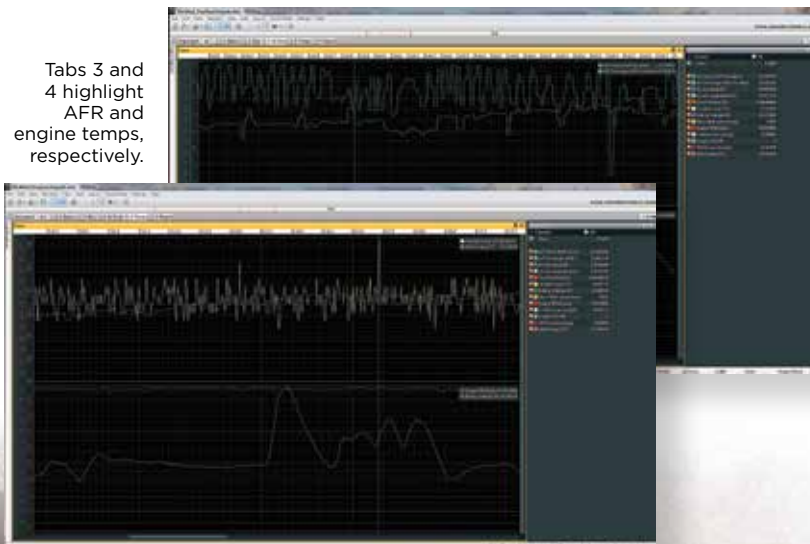
"The firmware and template combined with the matching AEM harness and sensors produce as near to a plug-and-play Sportsman logger as anyone has accomplished."



The Drag Race Template in AEMdata has five tabs. The first tab shows the basics and users can drag and/or remove any channels they do not want to see into one of the prebuilt lanes.



Tab 2 has a maths channel for slip that determines slip by gear based on driveshaft speed and engine RPM.



Tabs 3 and 4 highlight AFR and engine temps, respectively.

Channel	Min	Max	Avg	Start	End
Air Temp (°F) (Channel 1)	81.000000	121.000000	93.000000	0.000000	1.000000
Air Pressure (PSI) (Channel 2)	14.700000	14.700000	14.700000	0.000000	1.000000
Water Temp (°F) (Channel 3)	170.000000	210.000000	190.000000	0.000000	1.000000
Engine RPM (Channel 4)	0.000000	6000.000000	3000.000000	0.000000	1.000000
Throttle Position (%) (Channel 5)	0.000000	100.000000	50.000000	0.000000	1.000000
Air/Fuel Ratio (Channel 6)	14.700000	14.700000	14.700000	0.000000	1.000000
Air/Fuel Ratio (Channel 7)	14.700000	14.700000	14.700000	0.000000	1.000000
Air/Fuel Ratio (Channel 8)	14.700000	14.700000	14.700000	0.000000	1.000000

The 5th tab is a channels report that charts min/max values, averages and start/end log times for all inputs.



WINNING

John Warren's AQ-1-equipped "Nuclear Banana" Chevy Nova wins 2015 NMCA Edelbrock Xtreme Street Class at NMCA World Street Finals, personal best 7.68 at 178 MPH!
Photo by Tabitha Sizemore.





Infinity ECU Overview

The Infinity ECU delivers high end Motorsports capabilities powerful enough for professional teams at a price that makes it attainable for sportsman racers. Infinity systems come fully enabled without the need for feature add-on purchases. Combined with AEM's industry leading after-purchase support system, including free technical support, the Infinity is the ultimate engine control solution for both professional race teams and weekend track cars.

The Infinity's airflow-based tuning models simplify system installation and speed the tuning process by eliminating many of the setup requirements necessary in previous generation ECUs. By tuning the ECU based on the Volumetric Efficiency and the desired Air-Fuel Ratio for the engine, the resulting calibration values make logical sense to the user.

The Infinity ECU is built around a 200MHz, 32-bit automotive processor and Real Time Operating System (RTOS), which is capable of processing 400 million instructions per second. It is dramatically more powerful than many other current Motorsports ECUs commonly available. This allows the Infinity to do more, faster, in a more stable programming environment.

- > The Infinity's 200MHz processor allows the ECU to fully update the model more frequently than the competition, allowing the ECU to always use the most accurate, up to date sensor data before injecting fuel or firing the ignition, allowing the Infinity to control the engine more accurately
- > The Infinity's speed allows for more crank trigger pulses per revolution and at higher RPMs. This allows for more accurate ignition timing, which enables an engine to create more power
- > The Infinity's more powerful processor allows it to data log up to 100 channels, each at up to 1000 times per second simultaneously, with no impact on the model processing function or running the engine

Key Features:

- > Airflow model based (VE) tuning
- > ECU Set Up Wizard simplifies start up
- > Flex fuel compatible
- > Multi fuel capable
- > Drive by wire (Series 5 & 7)
- > Variable valve control
- > Multiple boost control strategies
- > Nitrous control
- > Map switching
- > Internal Lambda control (Series 5 & 7)
- > Knock sensing circuits
- > Data logging up to 64GB, up to 100 channels at 1KHz (Series 5 & 7)
- > Outputs to 3rd party dashes and data loggers
- > Industry leading data transfer speed (up to 480Mb/sec) (Series 5 & 7)
- > Integrated engine protection strategies
- > Sealed enclosure and IP67 rated comms ports

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RECORD SETTER

Andy Lee's Infinity-tuned Pirelli World Challenge GTS Bondurant/Laguna Bicycles Z28 Camaro, #1 Qualifier, Fastest Lap and Win in Sonoma, 2015.



Infinity Series 3

The new Infinity Series 3 features a single, 73-pin connector and is ideal for basic crate engines and marine applications, as well for as upgrading engines currently using MEFI based systems. See *page 23* for detailed specifications.



- > Infinity 308 = 8 (0-5v falling edge) ignition coil outputs and 8 saturated injector drivers plus a single direct drive ignition coil output and 2 low impedance injector drivers. These extra drivers allow the 308 to be retrofitted to older GM TBI engines, which makes the Infinity 308 a great upgrade for users looking to replace their older MEFI-4 system. This system also provides users with an upgrade path to sequential port injection and coil near plug in the future
- > Infinity 358 = 8 (direct drive) ignition coil outputs, 8 saturated injector drivers for V8 and other applications. The Infinity 358 is the perfect solution for Ford and Mopar Hemi applications where the coils need to be driven directly by the ECU

Infinity Series 5

The Infinity Series 5 features a single, 80-pin connector with either 6 ignition coil outputs and 6 low-impedance injector drivers, or 8 ignition coil outputs and 8 saturated injector drivers. It is designed for high performance, late model vehicles, late model crate engines and late model Powersports vehicles that employ sophisticated electronics like variable cam timing and drive-by-wire but do not need the maximum amount of inputs/outputs. See *page 23* for detailed specifications



- > Infinity 506 = (formerly Infinity-6) 6 ignition coil outputs and 6 low impedance injector drivers for late model high performance vehicles up to 6 cylinders. Includes two-wheel speed traction control, 2-cam variable cam timing control and one onboard Lambda controller
- > Infinity 508 = (formerly Infinity-8h) 8 ignition coil outputs and 8 saturated injector drivers for 8-cylinder engines, including crate engines and popular V8 engine swaps. Includes two-wheel speed traction control, 2-cam variable cam timing control and one onboard Lambda controller

Infinity Series 7

The Infinity Series 7 features dual connectors totaling 129 pins. It is designed for today's late model high-performance EFI engines that use sophisticated electronics like variable cam timing and drive-by-wire and require the maximum amount of inputs/outputs. See *page 23* for detailed specifications.



- > Infinity 708 = (formerly Infinity-8) 8 ignition coil outputs and 8 low impedance injector drivers for late model high performance vehicles up to 8 cylinders. Includes four-wheel speed traction control, 4-cam variable cam timing control and dual onboard Lambda controllers
- > Infinity 710 = (formerly Infinity-10) 10 ignition coil outputs and 10 low impedance injector drivers for late model high performance vehicles up to 10 cylinders. Includes four-wheel speed traction control, 4-cam variable cam timing control and dual onboard Lambda controllers
- > Infinity 712 = (formerly Infinity-812) 8 ignition coil outputs and 12 low impedance injector drivers for late model high performance vehicles up to 8 cylinders using semi-sequential or wasted spark ignition, six cylinder engines that run sequential secondary injectors and V8 engines that run secondary injectors in pairs using two injectors per output. Includes four-wheel speed traction control, 4-cam variable cam timing control and dual onboard Lambda controllers

Selecting the Right Infinity Solution for Your Race Vehicle

Infinity ECUs are designed for maximum flexibility across many types of applications. ECU modules and harnesses are sold separately for both Wire-In and Plug & Play applications. Choose the ideal Infinity ECU based on your application's ignition and fuel injector output requirements using the Infinity Specifications Chart (see page 23), and then choose between our available Plug & Play or Universal harnesses to create the Infinity solution that suits your specific needs.

Plug & Play vs. Wire-In Applications

The Infinity ECU delivers comparable tuning functionality regardless of application type. It is available for a wide variety of applications in two distinct forms:

Plug & Play Applications

Infinity Plug & Play applications are available for select vehicles. Plug & Play applications support a vehicle's engine and most other ancillary vehicle systems, and include application-specific start up calibrations. The Infinity Plug & Play harness (sold separately) connects directly into a vehicle's factory engine harness and requires no additional wiring.

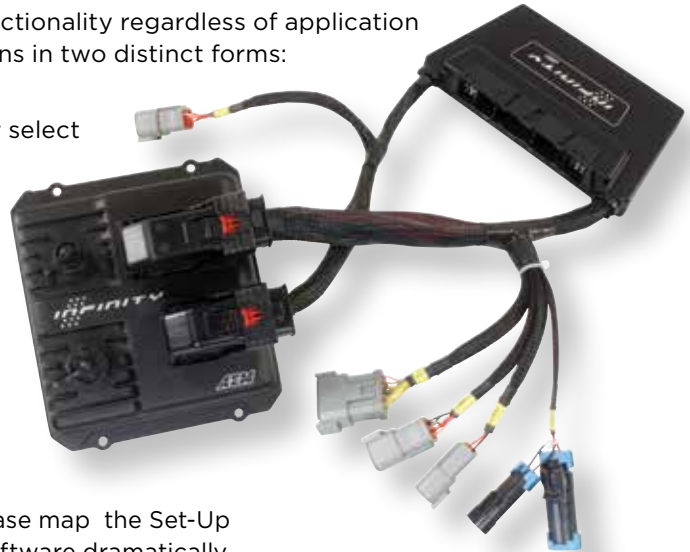
Wire-In Applications

Infinity Wire-In applications have validated cam/crank timing patterns and many include base calibrations for easy start up. For Wire -In applications without a base map the Set-Up Wizard included with InfinityTuner user interface software dramatically simplifies initial tuning configuration to help ensure successful initial startup.

After determining your input/output (I/O) requirements using the Specifications Guide on page 23, confirm that the Infinity ECU supports your application using the Application Guide starting on page 24.

AEM offers Universal wiring harnesses in several iterations and detailed application-specific wiring instructions/schematics (see *Wiring Harness Solutions, below*).

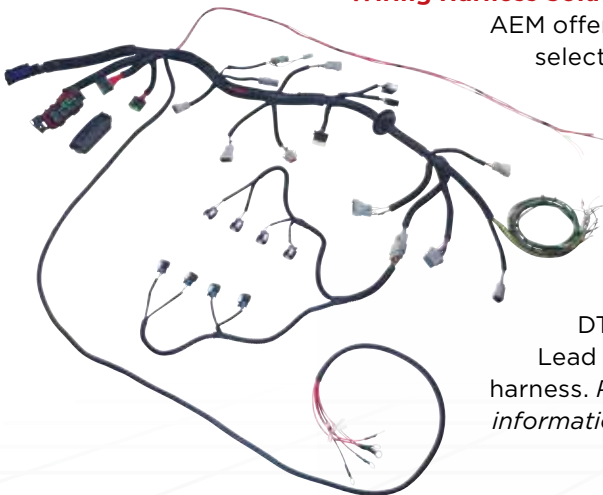
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Wiring Harness Solutions

AEM offers Plug & Play adapter and engine harness solutions for select Japanese, European, Domestic, Crate Engine, Marine and Powersports applications. Please see pages 14-19 for more information.

Universal Core & Accessory Wiring Harnesses are available for 4-, 6- and 8-cylinder engines and allow users to create an application specific harness by connecting cam & crank, injector, ignition and other sub harness assemblies for a vehicle to a main engine harness using DTM-style connectors. Plug & Pin kits and Universal Flying Lead harnesses are also available for creating a custom wiring harness. Please see page 25 for *Harness Application and Part Number information*.



2015 CHAMPION

Tony Szirka, UMS Tuning's
Infinity tuned EVO, 2015 NASA
TTU Western States Champion,
Mazda Laguna Seca Raceway.

The Infinity ECU is becoming the engine management system of choice in multiple professional and top level amateur racing series. Its flexibility and durability allow it to be used in virtually any type of racing, and its ease of use is becoming the benchmark for teams who want the ability to quickly analyze data and make changes that will put their driver on top of the podium. Some of the racing series you will find the Infinity ECU include:

TORC

The Off Road Championship Series. The Infinity is used on every EFI-equipped Pro-4 racetruck.



Photo courtesy of TORC

FIA RX Lites, GRC Lites and Scandinavian Rallycross Supercar Lites

The Series 7 Infinity ECU has been relied upon to control the engines of every Lites racecar in FIA World Rallycross RX Lites and Scandinavian Rallycross Supercar Lites since the 2015 season. It has controlled the engines in every Global Rallycross Lites racecar since 2014.



Photo by Jan Tore Brustad

NASA Prototype

NASA Racing's Elan-built, single-seat prototype NPO1 racecars all utilize the Infinity Series 5 ECU for engine control and data acquisition.



Photo courtesy of NASA

SCCA Trans AM

Beginning with the 2016 race season, all TA2 class cars will count on the Infinity Series 5 ECU for engine control and data acquisition.



Photo by Chris Clark



Plug & Play Wiring Harnesses

AEM offers several different types of Plug & Play Wiring harnesses depending on the complexity of a vehicle's factory controls and communications system. All Plug & Play harnesses allow you to make a direct connection to the factory engine wiring harness and in most cases use all of the factory sensors (additional sensors may be required on some engines). Applications that have a Plug & Play wiring harness include a downloadable base map for the engine.

Built In Auxiliary Expansion Port

Infinity Plug & Play harnesses include a DTM-style 12-pin auxiliary expansion port to adapt ancillary inputs and outputs not available in the factory harness, including 5v and 12v sensor power and sensor ground pins. Commonly used inputs and outputs include fuel pressure, oil pressure, ethanol content, wheel speeds, wastegate control solenoids, mode switch, nitrous activation relays and other popular functions.

- > Plugs into factory wiring harness
- > Uses factory sensors (additional sensors may be required)
- > Closed loop wideband feedback control via on-board UEGO sensor controller(s)
- > Supports factory variable valve timing (if equipped)
- > Map switching capability using 12-position Trim Pot



PN 30-3509 Honda PNP harnesses for B-, D, and H Series engines. The ignition connector (far right) has an optional distributor adapter plug for use with distributed systems (sold separately). Whenever possible AEM makes accommodations in its harnesses for both factory and common high performance wiring combinations. K-Series and S2000 harnesses also available.

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PN 30-3512 PNP harness for Mitsubishi EVO IX.

RECORD SETTER

Prayoonto Racing's Infinity-tuned All Motor Drag Civic. All Motor record holder 9.68 @ 144 MPH.



For late model vehicles that employ sophisticated vehicle controls and CANbus systems, AEM Plug & Play harnesses allow the Infinity to employ racing features through the vehicle's CANbus. This eliminates the need to add ancillary position switches for things like map switching, launch control, Drive-by-Wire profiles and traction control. The Infinity is able to control continuously variable cam timing (up to 4 cams), and full dashboard functionality is retained.

- > Mode switching through factory Cruise Control buttons
- > Use factory buttons to change DBW profiles, as a 3-step rev limiter, and for traction control using the factory wheel speed/ABS sensors
- > Designed to fit in a vehicle's factory ECU location and completely replaces stock ECU
- > CANbus dashboard functionality is retained
- > Uses factory boost control solenoid (when applicable)



PN 30-3905 Infinity PNP Harness for Porsche 997.1 supports the stock MAF sensor, variable geometry turbos, bypass valves and charge pressure sensor on turbo models, fuel pumps, EGTs, widebands and more. On late model race vehicles with sophisticated CANbus communications systems, AEM is able to use the factory CANbus to incorporate racing features like map switching, DBW profiles, traction control, launch and more into the factory buttons.

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2015 CTCC CHAMPION

Infinity-tuned Clearwater Design Porsche 996 Turbo driven by Ian Crerar. 2015 CTCC GT Champion.



INFINITY PLUG & PLAY WIRING HARNESSSES

AEM's Plug & Play Adapter Harnesses for Powersports and motorcycle applications supports factory sensors including MAP and AIT, and the factory injectors. Whenever possible, Drive-by-Wire, factory boost control on turbocharged applications are also supported. Full dashboard functionality is retained and an ignition coil driver, MAP sensor and wideband AFR sensor is included to ensure quick installation.

Powersports & Motorcycle Plug & Play Harness Key features:

- > Full dashboard functionality
- > AWD control (when applicable)
- > Closed-loop wideband feedback control
- > Flex fuel compatible
- > Multiple programmable boost control strategies
- > Multiple programmable engine protection strategies
- > Uses factory knock sensor
- > Secondary injector control
- > Launch limiter
- > Rolling launch antilag
- > On-the-fly map switching

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PN 30-3822 Polaris RZR XP Turbo
Plug & Play Adapter Harnesses



Williford Racing's Infinity-tuned, turbocharged Hayabusa, 7.49 @ 202.64 MPH, piloted by Jordan Haase. Uses AEM sensors, ignition coil driver and 380lph High Flow fuel pump.

RECORD SETTER

JPC Racing's record-setting Coyote Turbo Mustang, 7.59 @ 183 MPH, NMRA Bradenton, FL 2015.



Some Infinity Plug & Play harnesses are designed to adapt to a factory engine harness or crate engine harness like the Ford Racing Controls Pack harness. Like all Infinity Plug & Play harnesses, a base map is included. If applicable variable cam timing control and Drive-by-Wire functionality is retained, and the harnesses include provisions to adapt MAF-sensor equipped engines to speed density.



PN 30-3813 Coyote Plug & Play Engine Adapter Harness provides a connection between the Infinity ECU and factory engine wiring harness.

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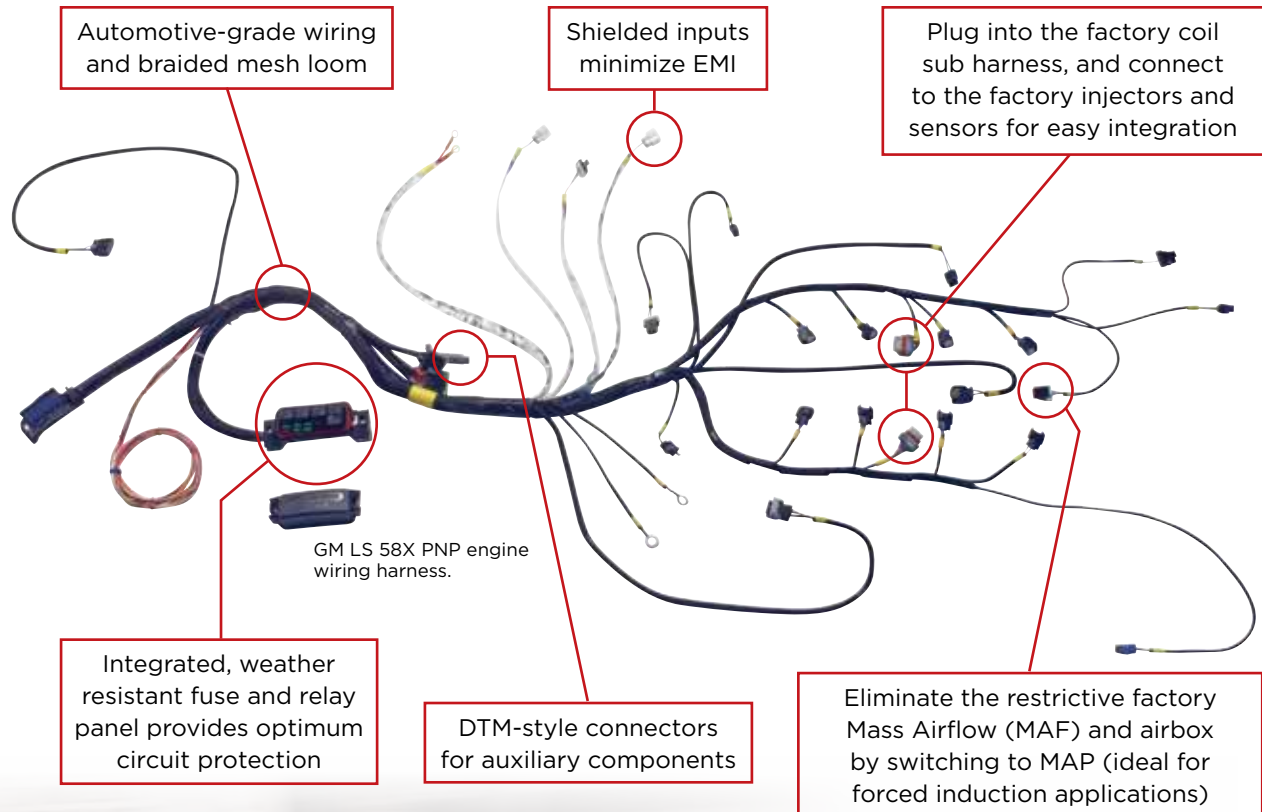
PN 30-3812 Coyote Infinity Plug & Play Adapter Harness is designed for racing engines that already have the Ford Racing Controls Pack installed. It provides a quick connection (installation takes less than 30 minutes).



Plug & Play Engine Wiring Harnesses

AEM offers Plug & Play engine wiring harnesses that install easily by connecting to a vehicle's factory sensors. These harnesses utilize Automotive-grade, color-coded wiring and shielded inputs for optimum performance. Water and shock-proof factory connectors for the sensors are used throughout the harness, as well as DTM-style connectors for auxiliary components. Connections for a wideband O2 sensor, Drive-by-Wire and pedal, Knock, and AEMnet (AEM's CAN bus) are integrated into the harness.

An integrated fuse and relay panel includes five relays and seven fuses that provides robust power distribution, engine circuit protection, and easier integration of additional features. Relays with flying leads are included for the fuel pump and fans. The panel's housing is weather resistant and panel lid is weatherproof for added protection.



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FASTER

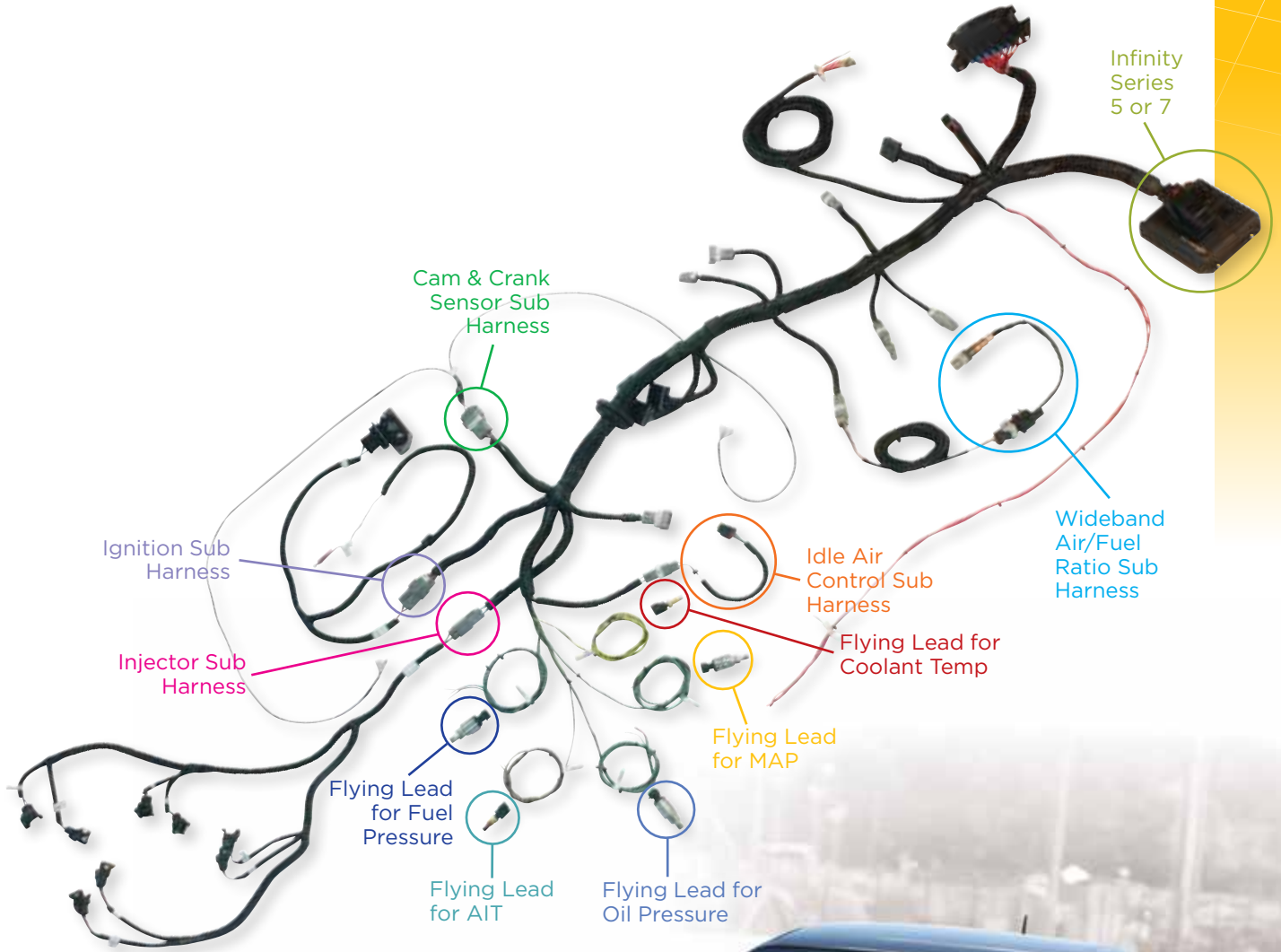
John Schaeffer's Infinity-tuned LS Nitrous Camaro tuned by Sho-Me Speed. 8.50 @ 160 MPH in its first race (LS Fest 2015). Personal best of 8.41 @ 160 MPH.



Universal Core & Accessory Wiring Harnesses

Infinity Series 5/7 Universal Core and Accessory Harnesses enable users to create a custom wiring harness for their 4-, 6- or 8-cylinder engine by connecting engine-specific accessory sub harnesses to a universal core harness using high-quality DTM-style connectors. Core Harnesses include a weather-resistant fuse panel with 5 relays and 7 fuses, and both Core and Accessory Harnesses are made from automotive-grade wiring wrapped in braided mesh loom.

Select the correct injector, ignition, cam/crank timing, idle motor and drive-by-wire (if equipped) sub harness and mate them to a universal core harness using high-performance DTM-style connectors.



CHAMPION
CCC Racing's 67mm turbo EMS-tuned drag Civic. 2014 World Cup Finals True Street winner, 8.41 @ 175 MPH. Best ever MPH 185.



Infinity Universal Wiring Harnesses

AEM offers multiple options for Infinity users who want to design a custom wiring harness for their application that can ease the process. From Plug & Pin Kits to full flying lead harnesses, we have a solution that best fits your wiring goals.

Plug & Pin Kits

Infinity Plug & Pin kits include Molex connector(s) with covers, pins, weather seals, a micro relay and sealing plugs. These kits are intended for users who want to design a custom harness from the ground up.



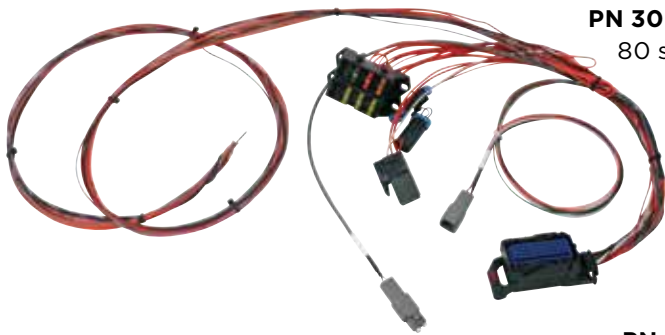
PN 30-3701 Plug & Pin Kit for Series 7 Infinity includes (1) 73-pin connector with cover, (1) 56-pin connector with cover, 130 small pins, 1 large pin with weather seal, 1 micro relay with pins, and 30 sealing plugs.



PN 30-3704 Plug & Pin Kit for Series 5 Infinity includes 80-pin connector with cover, 80 small pins, 1 micro relay with pins and 30 sealing plugs.

Mini Universal Harnesses

Infinity Mini Harnesses take some of the work out of creating a custom harness by including pre-wired power, grounds, power relay, fuse box, wideband and AEMnet, but uses shorter flying lead lengths that allow the user to custom tailor the wire lengths to their application.



PN 30-3705 Series 5 Infinity Universal Mini Harness. 80 small pins and 30 sealing plugs included.



PN 30-3703 Series 7 Infinity Universal Mini Harness. 100 small pins and 30 sealing plugs included.



Series 7 Universal Wiring Harness

PN 30-3702 Series 7 Infinity Universal Wiring Harness includes everything you need to custom wire your Infinity ECU including pre-wired power and grounds, power relay, fuse box, dual wideband connectors, AEMnet connector and 100 x 96" terminated wires.

Marine Applications

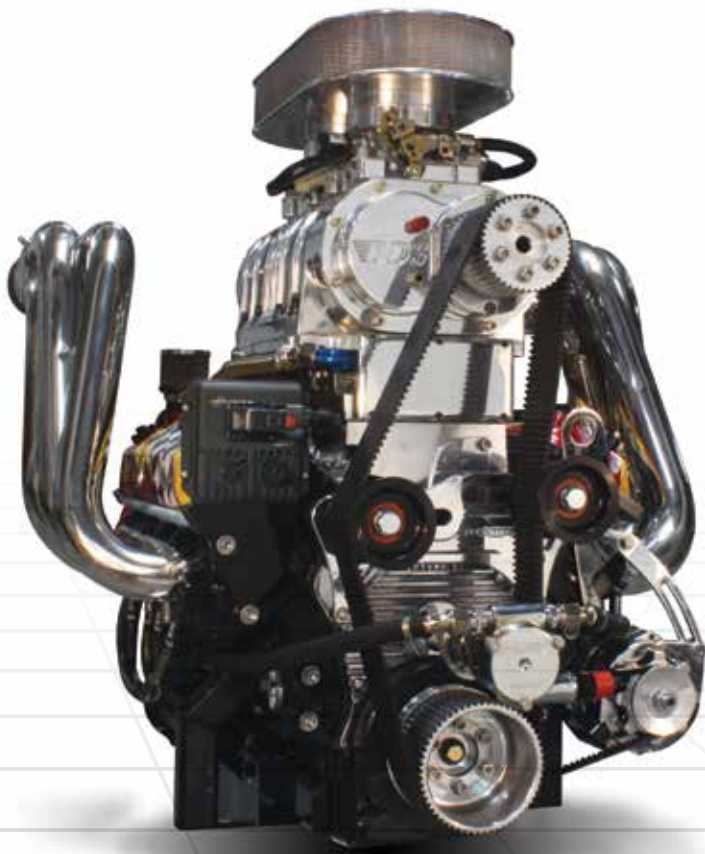
The Infinity's software architecture for marine includes the features critical to successful operation in a marine environment, and additional capabilities not commonly found in many popular dedicated marine EFI systems. The Infinity's housing is sealed and has IP67-rated ports for tuning and data logging (dustproof, waterproof to 1m).

Key Infinity Marine EFI Features Include:

- > VE-based speed density fuel control does not require corrections for altitude
- > Communicates with 3rd party digital dashes and loggers
- > NMEA 2000 communications available
- > Programmable rev limiter tied to engine acceleration rate to prevent mechanical overrevs (if propeller leaves the water)
- > Engine control for up to 10 cylinders
- > Wasted spark, distributed and coil-on-plug ignition
- > Ability to drive up to 16 injectors (semi sequential)
- > Sophisticated cold and warm start strategies
- > Robust idle, shift and docking management control



- > Fast action pulsewidth modulated (PWM) idle air controller (IAC) ready
- > 10x cylinder ignition trim and 200-point individual cylinder fuel trim with 64-point injector phasing
- > Flex fuel capable with real-time blend transition mapping (requires flex fuel sensor, sold separately)
- > Programmable boost control tied to throttle, flex content, air temp, coolant temp, baro, mode switch, etc.
- > Programmable variable cam control up to 4 cams
- > Two programmable Drive-by-Wire profiles
- > Multiple engine protection strategies including lean, overboost, oil pressure, fuel pressure, coolant and oil temp protection
- > Programmable knock control & boost control response features
- > Programmable alarm inputs & outputs that integrate with your existing systems
- > Durable, weather resistant circuitry in fully sealed enclosure
- > IP67-rated communications ports
- > Data logging capability up to 64GB, up to 1KHz per channel
- > Free AEMdata analysis software with video overlay using any video file type
- > Virtually limitless tuning layouts
- > EFI processing speed of 400 MIPS



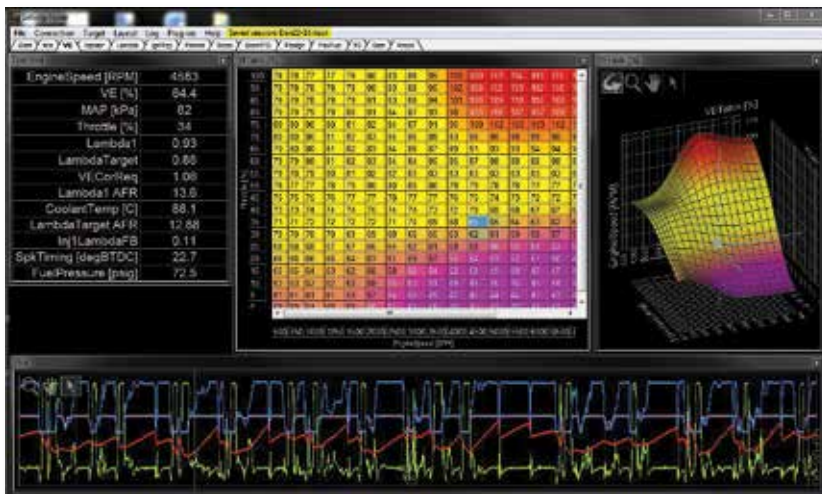
BOOSTPOWER USA's Infinity 508-tuned, blown big block marine engine.

InfinityTuner Software

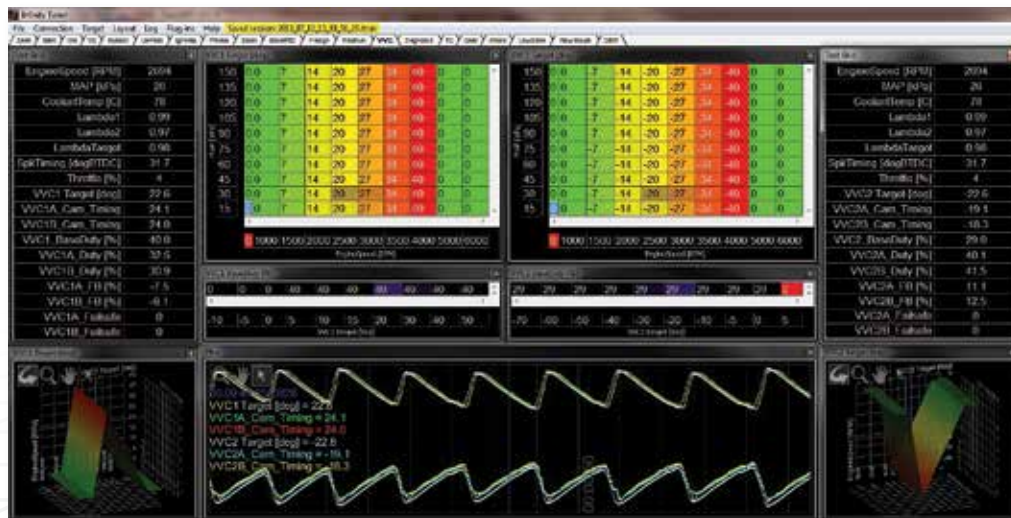
InfinityTuner software is optimized for speed and performance with super high resolution 3D tables. It features user-selectable control types for custom layouts, allowing you to create a layout that best fits your tuning style and globally view unit preferences the way you want throughout the software (kpa or psi, AFR or Lambda, etc.).

A Setup Wizard simplifies calibration work through a smart interface; simply enter known engine data like displacement, cylinder count, firing order, etc., and the Wizard does the rest. A Help feature is integrated into the Setup Wizard; press the F1 key and the software launches the tuning guide that highlights displayed information about the Wizard page being used.

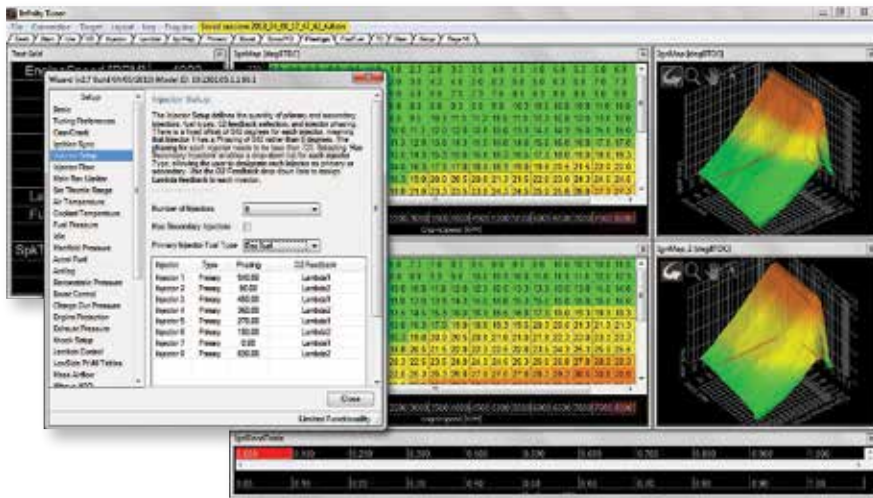
A data logging playback mode in the software syncs all windows and tables to the logged data for calibration editing, which reduces tuning time and allows you to make changes exactly where you need to.



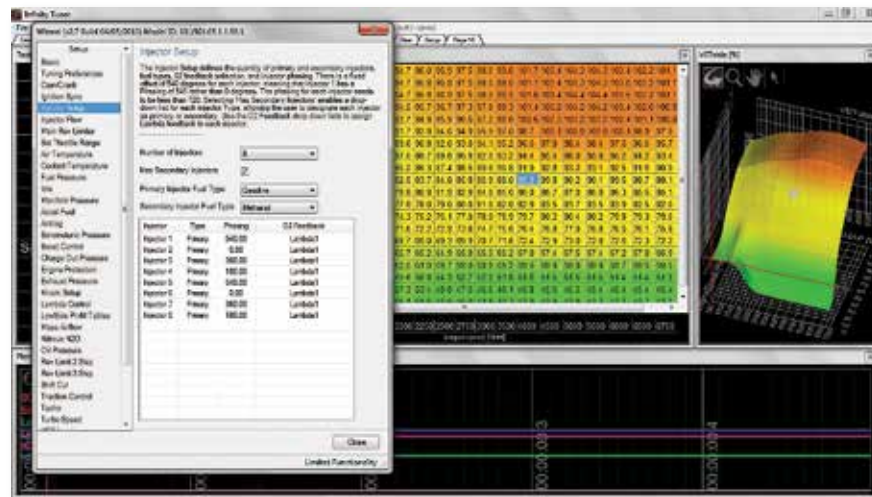
InfinityTuner's fully customizable workspace puts tables and graphs where you want them. Data logging playback mode is synced to controls and lets you edit calibrations right where you need to, speeding up tuning time and improving tuning accuracy.



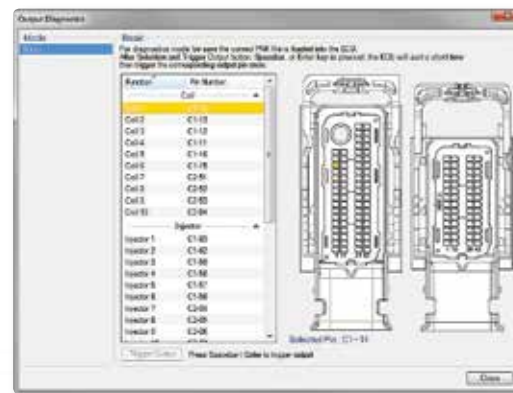
InfinityTuner simplifies complex tuning features like 4-cam variable cam timing control by allowing you to maximize your workspace.



The Setup Wizard simplifies many tasks by allowing the tuner to input known data for virtually every control type. If you need help, pressing the F1 key launches the tuning guide and highlights the wizard page being used.



The Wizard breaks down Drive-by-Wire setup into 6 easy steps. In the background InfinityTuner simultaneously samples multiple inputs while calibrating the pedal positions and throttle position sensors.



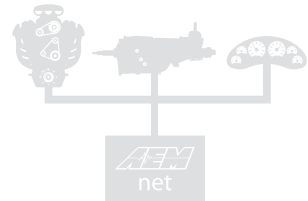
Manually trigger outputs from the Outputs Diagnostics Wizard to verify proper wiring. Select an output to test and the Diagnostics Wizard highlights the pin location in the connector diagram.

MOTOR SPORTS ONLY

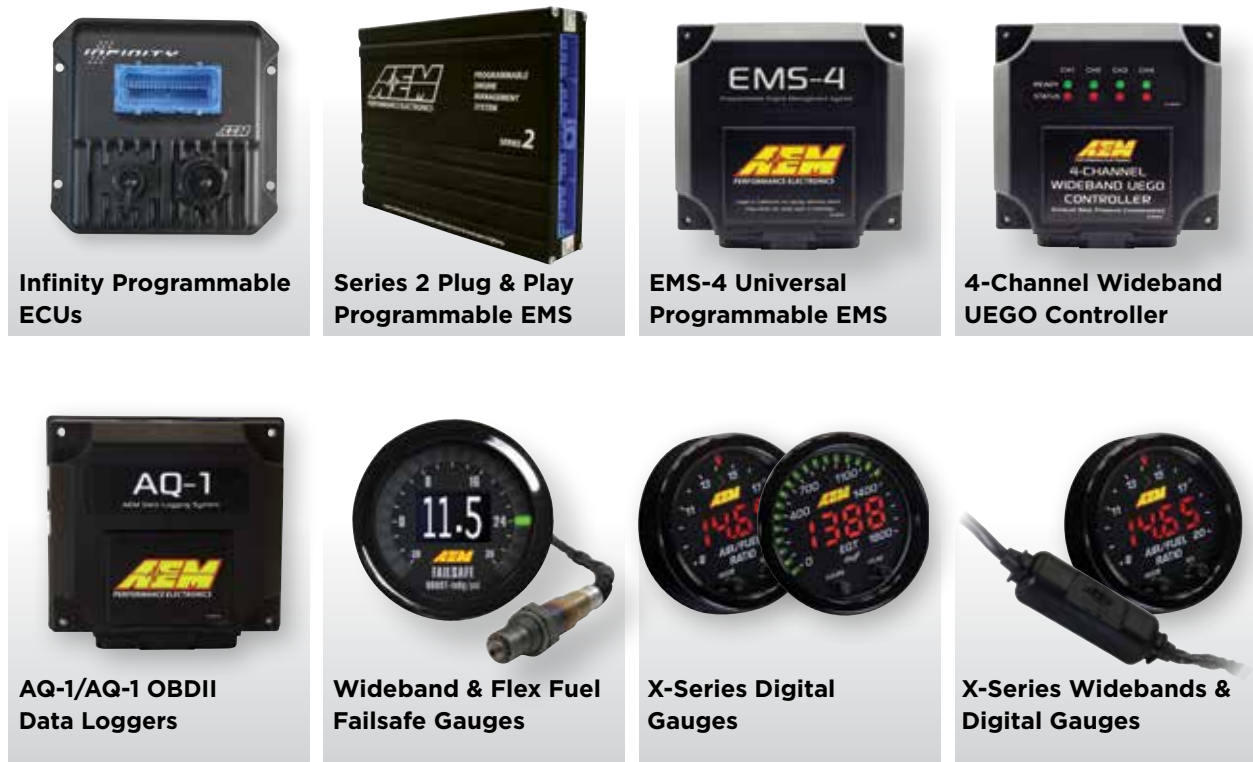


AEMnet—Daisy Chain Capability for Equipped AEM Devices

AEMnet is an open architecture software and hardware interface based on the CAN 2.0 specification, which provides the ability for multiple enabled devices to easily communicate with each other through a single cable.



AEMnet Equipped Devices



NEW Vehicle Dynamics Module (VDM)

Provides Full Track Mapping Capability for Infinity ECU Users!

The AEM VDM is an AEMnet CANbus enabled device that has an on-board 3-axis accelerometer, 3-axis gyrometer and 5Hz GPS + GLONASS that provides pinpoint accuracy. Users of the Infinity ECU and AQ-1 Datalogger can use the VDM for chassis tuning, while the GPS + GLONASS delivers vehicle speed, position, heading and altitude which allows you to use AEMdata's powerful track mapping capabilities. Simply install it in the correct position, plug it in and let the data stream through the AEMnet CANbus!

- > Ideal for road racers who want to incorporate lateral Gs into traction control
- > Perfect for drag racers who want launch control that includes wheel stand inputs
- > GPS latitude & longitude delivers AEMdata track map functionality
- > GPS vehicle speed, heading and altitude for data analysis
- > Continuous time data can be used for Infinity USB log file naming
- > Accelerometers supply all 3-axis acceleration for chassis tuning
- > All data streams through AEMnet CANbus
- > Status LED indicates power, GPS signal and error codes



SPECIFICATIONS	Infinity-712 PN: 30-7111	Infinity-710 PN: 30-7100	Infinity-708 PN: 30-7101	Infinity-508 PN: 30-7108/7112	Infinity-506 PN: 30-7106	Infinity-308 PN: 30-7113	Infinity-358 PN: 30-7114
2-Stroke Engines	yes	yes	yes	yes	yes	yes	yes
4-Stroke Engines	yes	yes	yes	yes	yes	yes	yes
Cylinders	Up to 8	Up to 10	Up to 8	Up to 8	Up to 6	Up to 8	Up to 8
Injector Drivers	12 High or Low Impedance	10 High or Low Impedance	8 High or Low Impedance	8 High Impedance	6 High or Low Impedance	8 High Impedance	8 High Impedance
Low Impedance Injector Drivers	12	10	8	n/a	6	2	n/a
Coils (0-5V Falling Edge)	12	10	8	8	6	8	n/a
Coils (Direct Drive)	n/a	n/a	n/a	n/a	n/a	1	8
Digital Inputs	Up to 8	Up to 8	Up to 8	Up to 6	Up to 6	Up to 3	Up to 3
VR/Mag Inputs	Up to 6	Up to 6	Up to 6	Up to 4	Up to 4	Up to 2	Up to 2
Analog Voltage Inputs	Up to 17	Up to 17	Up to 17	Up to 9	Up to 9	Up to 9	Up to 9
Analog Temp Inputs	Up to 6	Up to 6	Up to 6	Up to 3	Up to 3	Up to 3	Up to 3
Knock Control	2-Channel	2-Channel	2-Channel	2-Channel	2-Channel	2-Channel	2-Channel
On Board Wideband Air/Fuel Controllers	2	2	2	1	1	n/a	n/a
Drive-By-Wire	Dual	Dual	Dual	Single	Single	n/a	n/a
H-Bridge Channels	2	2	2	1	1	n/a	n/a
High Side Outputs	Up to 3	Up to 3	Up to 3	1	1	n/a	n/a
Low Side Outputs	10	10	10	6	8	10	10
Low Side Outputs that can be PWM	7	7	7	3	5	3	3
4-Wire Stepper Motor Control	yes	yes	yes	yes	yes	yes	yes
CAN Channels	2	2	2	2	2	1	1
Boost Control (details in platform specific product pages)	yes	yes	yes	yes	yes	yes	yes
Variable Cam Control	Up to 4	Up to 4	Up to 4	Up to 2	Up to 2	n/a	n/a
Engine Protection**	yes	yes	yes	yes	yes	yes	yes
Launch Control	yes	yes	yes	yes	yes	yes	yes
Nitrous Control	Up to 4-Stage	Up to 4-Stage	Up to 4-Stage	Single Stage	Single Stage	Single Stage	Single Stage
Traction Control	Up to 4-Wheel Speed	Up to 4-Wheel Speed	Up to 4-Wheel Speed	Up to 2-Wheel Speed	Up to 2-Wheel Speed	n/a	n/a
Onboard Data Logging	up to 64 GB	up to 64 GB	up to 64 GB	up to 64 GB	up to 64 GB	PC & Internal Log Book Only	PC & Internal Log Book Only
Weather Resistant Sealed Electronics	yes	yes	yes	yes	yes	yes	yes
Connector Pins	129	129	129	80	80	73	73
Enclosure Dimensions	6.75" x 6.00" x 1.8"	6.75" x 6.00" x 1.8"	6.75" x 6.00" x 1.8"	5.85" x 5.55" x 1.8"	5.85" x 5.55" x 1.8"	7.75" x 6.95" x 1.73"	7.75" x 6.95" x 1.73"
Weight	24 oz / 680.4g	24 oz / 680.4g	24 oz / 680.4g	16.8 oz / 476.27g	16.8 oz / 476.27g	29.9 oz / 848g	29.9 oz / 848g

** Engine protection is programmable and can be coolant temp., oil temp., oil pressure, AFR vs MAP, intake air temp., knock, Overboost and fuel pressure-based.



These products may be used solely on vehicles used in sanctioned competition which may never be used upon a public road or highway, unless permitted by specific regulatory exemption. It is the responsibility of the installer and/or user of this product to ensure that it is used in compliance with all applicable laws and regulations, and this product must not be purchased if the intent is to use it in an unlawful manner.

APPLICATIONS

Type	Make	Year	Model	Engine	Infinity Platform	Infinity Part Numbers	Harness PN
PnP	BMW	2001-2006	E46 M3	S54 3.2L I6	708, 710	30-7109, 7105	30-3510
Wire-In	BMW	1995-1999	E36 M3 (US Spec)	S50USB30 3.0L I6	506, 508, 708, 710, 712	30-7106, 7108, 7101, 7100, 7111	
Wire-In	Dodge	2003-2008	36-2-2-2 Crank	Hemi 5.7/6.1L V8	358, 508, 708, 710, 712	30-7114, 7108, 7101, 7100, 7111	
Wire-In	Dodge	2009-2012	60-2 Crank (incl VCT)	Hemi 5.7/6.1L/6.4L V8	358, 508, 708, 710, 712	30-7114, 7108, 7101, 7100, 7111	
Wire-In	Dodge	1996-2006	Viper	8.0/8.3L V10	710	30-7100	
Wire-In	Dodge	2008-2010	Viper	8.4L V10	710	30-7100	
Wire-In	Dodge	2013+	60-2 Crank (incl VCT)	Hemi 5.7/6.1L/6.4L V8	358, 508, 708, 710, 712	30-7114, 7108, 7101, 7100, 7111	
PnP	Ford	2011-2014	Ford Racing Controls Pack Only	Coyote 5.0L V8	708, 710, 712	30-7101, 7100, 7111	30-3812
PnP	Ford	2011-2014	Adapts to Stock Coyote Engine Harness	Coyote 5.0L V8	708, 710, 712	30-7101, 7100, 7111	30-3813
Wire-In	Ford	1996-2004		Modular 2V 4.6L V8	358, 508, 708, 710, 712	30-7114, 7108, 7101, 7100, 7111	
Wire-In	Ford	2005-2009		Modular 3V 4.6L V8	358, 508, 708, 710, 712	30-7114, 7108, 7101, 7100, 7111	
Wire-In	Ford	1993-2006		Modular 4V 4.6L/5.4L V8	358, 508, 708, 710, 712	30-7114, 7108, 7101, 7100, 7111	
PnP Engine	GM			LS Engines 24x V8	708, 710, 712	30-7101, 7100, 7111	30-3532
PnP Engine	GM			LS Engines 58x V8	508	30-7108	30-3801
PnP Engine	GM			LS Engines 24x V8	508	30-7108	30-3821
Wire-In	GM		Universal Core/Accy Harnesses Avail.	Small Block V8	308, 508, 708, 710, 712	30-7113, 7108, 7101, 7100, 7111	
Wire-In	GM		Universal Core/Accy Harnesses Avail.	Big Block V8	308, 508, 708, 710, 712	30-7113, 7108, 7101, 7100, 7111	
Wire-In	GM		Small Cap HEI	Vortec 5.7L V8	308, 508, 708, 710, 712	30-7113, 7108, 7101, 7100, 7111	
PnP	Honda	2000-2005	S2000	F20 & F22 non-DBW 2.0/2.2L I4	506, 508	30-7106/7108	30-3508
Wire-In	Honda	2007-2013		J37A1 3.7L V6	506, 508, 708, 710, 712	30-7106, 7108, 7101, 7100, 7111	
PnP	Honda/Acura	1992-1995		B/D/H Series OBD1 I4	506, 508	30-7106, 7108	30-3501
PnP	Honda/Acura	2002-2005		K-Series 2.0/2.4L I4	506, 508	30-7106, 7108	30-3502
PnP	Honda/Acura	1999-2001		B/D/H Series OBD2B I4	506, 508	30-7106, 7108	30-3509
Wire-In	Mazda			13B, 20B Rotary	506	30-7106	
Wire-In	Mazda	2006-2015		MZR 2.0L I4	506, 508, 708, 710, 712	30-7106, 7108, 7101, 7100, 7111	
PnP	Mitsubishi	2003-2005	Lance Evolution VIII	4G63T USDM 2.0L I4	506, 508	30-7106, 7108	30-3511
PnP	Mitsubishi	2006	Lance Evolution IX	4G63T USDM 2.0L I4	506, 508	30-7106, 7108	30-3512
PnP	Nissan	1989-1998	Skyline GT-R	RB26DETT 2.6L I6	506, 508	30-7106, 7108	30-3515
PnP	Nissan	1994-1996	Silvia	SR20DET 2.0L I4	506, 508	30-7106, 7108	30-3517
PnP	Nissan	2003-2006	350Z	VQ35DE 3.5L V6	708, 710	30-7110, 7107	30-3520
PnP	Polaris	2011-2014	RZR 900	900cc I2	558	30-7112	30-3808
PnP	Polaris	2014-2015	RZR XP 1000	1000cc I2	558	30-7112	30-3811
PnP	Polaris	2016+	RZR XP Turbo	925cc I2 Turbo	558	30-7112	30-3822
PnP	Porsche	2001-2005	996 Turbo	3.6L H6 Turbo	708, 710	30-7109, 7105	30-3902
PnP	Porsche	2005-2009	997.1 NA, 997.1 Turbo	3.6L & 3.8L NA, Turbo H6	708, 710	30-7109, 7105	30-3905
PnP	Porsche	2005-2008	987 Cayman/S	2.7/3.4L H6	708, 710	30-7109, 7105	30-3905
Wire-In	Subaru	2002-2007		EJ257 2.5L H4	506, 508, 708, 710, 712	30-7106, 7108, 7101, 7100, 7111	
Wire-In	Subaru	2008+		EZ36D 3.6L H6	506, 508, 708, 710, 712	30-7106, 7108, 7101, 7100, 7111	
PnP	Suzuki	2002-2007	GSXR1300 Hayabusa	1300 1.3L I4	506	30-7106	30-3550
PnP	Toyota	1994-1998	Supra TT	2JZ-GTE 3.0L I6	708, 710, 712	30-7101, 7100, 7111	30-3500
Wire-In	Toyota	1997-2002		2JZ-GTE VVT-i 3.0L I6	506, 508, 708, 710, 712	30-7106, 7108, 7101, 7100, 7111	
Wire-In	Toyota	2005-2012	Intake VVT-i only	2GR-FE 3.5L V6	506, 508, 708, 710, 712	30-7106, 7108, 7101, 7100, 7111	
PnP	VW	2002-2005	MKIV Golf/Jetta	1.8T DBW I4	506, 508	30-7106, 7108	30-3903

UNIVERSAL APPLICATIONS*

CRANK	CAM	VEHICLE/ENGINE INFORMATION	INFINITY PLATFORM**					Notes
			Teeth	Pulses	Description	I-506	I-508	
4	1	Universal Cam and Crank	30-7106	30-7108	30-7101	30-7100	30-7111	Mag or Hall Sensors
8	1	Universal Cam and Crank	30-7106	30-7108	30-7101	30-7100	30-7111	Mag or Hall Sensors
8-1	1	Universal Cam and Crank	30-7106	30-7108	30-7101	30-7100	30-7111	Mag or Hall Sensors
12	1	Universal Cam and Crank	30-7106	30-7108	30-7101	30-7100	30-7111	Mag or Hall Sensors
24	1	Universal Cam and Crank	30-7106	30-7108	30-7101	30-7100	30-7111	Mag or Hall Sensors
36-1	1	Universal Cam and Crank	30-7106	30-7108	30-7101	30-7100	30-7111	Mag or Hall Sensors
36-2	1	Universal Cam and Crank	30-7106	30-7108	30-7101	30-7100	30-7111	Mag or Hall Sensors
60-2	1	Universal Cam and Crank	30-7106	30-7108	30-7101	30-7100	30-7111	Mag or Hall Sensors

UNIVERSAL FLYING LEAD HARNESSES/PLUG & PIN KITS

Type	Infinity Platform	Infinity Part Numbers	Harness PN
Plug & Pin Kit	708, 710, 712	30-7101, 7100, 7111	30-3701
Flying Lead	708, 710, 712	30-7101, 7100, 7111	30-3702
Flying Lead	708, 710, 712	30-7101, 7100, 7111	30-3703
Plug & Pin Kit	506, 508	30-7106, 7108	30-3704
Flying Lead	506, 508	30-7106, 7108	30-3705
Mini-Flying Lead	506, 508	30-7106, 7108	30-3706

UNIVERSAL CORE & ACCESSORY WIRING HARNESSSES

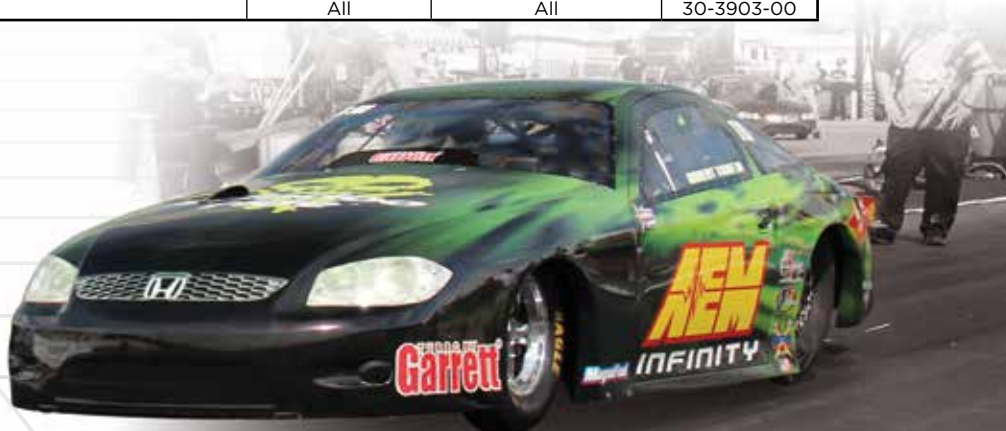
Type	Make	Model	Infinity Platform	Infinity Part Numbers	Harness PN
Core	Universal		708, 710, 712	30-7101, 7100, 7111	30-3805
Core	Universal		506, 508	30-7106, 7108	30-3809
Core Extension	GM Injector Adapter EV1		708, 710, 712, 506, 508	30-7101, 7100, 7111, 7106, 7108	30-3805-00
Core Extension	Ford Injector Adapter EV1		708, 710, 712, 506, 508	30-7101, 7100, 7111, 7106, 7108	30-3805-01
Core Extension	Single Channel Ignition		708, 710, 712, 506, 508	30-7101, 7100, 7111, 7106, 7108	30-3805-02
Core Extension	MAG Cam / MAG Crank		708, 710, 712, 506, 508	30-7101, 7100, 7111, 7106, 7108	30-3805-03
Core Extension	HALL Cam / MAG Crank		708, 710, 712, 506, 508	30-7101, 7100, 7111, 7106, 7108	30-3805-04
Core Extension	MAG Cam / HALL Crank		708, 710, 712, 506, 508	30-7101, 7100, 7111, 7106, 7108	30-3805-05
Core Extension	HALL Cam / HALL Crank		708, 710, 712, 506, 508	30-7101, 7100, 7111, 7106, 7108	30-3805-06
Core Extension	GM Idle Stepper Motor		708, 710, 712, 506, 508	30-7101, 7100, 7111, 7106, 7108	30-3805-07
Core Extension	PWM Idle	*30-3805 Core harness only	708, 710, 712	30-7101, 7100, 7111	30-3805-08
Core Extension	AEM IGBT Coil Adapter, GM Cyl Numbering		708, 710, 712, 506, 508	30-7101, 7100, 7111, 7106, 7108	30-3805-09
Core Extension	GM Injector Adapter EV6		708, 710, 712, 506, 508	30-7101, 7100, 7111, 7106, 7108	30-3805-10
Core Extension	Ford Injector Adapter EV6		708, 710, 712, 506, 508	30-7101, 7100, 7111, 7106, 7108	30-3805-11
Core Extension	GM LS Coil Adapter, GM Cyl Numbering		708, 710, 712, 506, 508	30-7101, 7100, 7111, 7106, 7108	30-3805-12
Core Extension	AEM EPM, 15" for Rr Mounted Distributor		708, 710, 712, 506, 508	30-7101, 7100, 7111, 7106, 7108	30-3805-14
Core Extension	FAST Dual Sync, 15" for Rr Mounted Distributor		708, 710, 712, 506, 508	30-7101, 7100, 7111, 7106, 7108	30-3805-15
Core Extension	MSD Dual Sync, 15" for Rr Mounted Distributor		708, 710, 712, 506, 508	30-7101, 7100, 7111, 7106, 7108	30-3805-16
Core Extension	AEM IGBT Coil Adapter, Ford Cyl Numbering		708, 710, 712, 506, 508	30-7101, 7100, 7111, 7106, 7108	30-3805-17
Core Extension	GM LS Coil Adapter, Ford Cyl Numbering		708, 710, 712, 506, 508	30-7101, 7100, 7111, 7106, 7108	30-3805-18
Core Extension	AEM EPM, 35" for Fr Mounted Distributor		708, 710, 712, 506, 508	30-7101, 7100, 7111, 7106, 7108	30-3805-19
Core Extension	FAST Dual Sync, 35" for Fr Mounted Distributor		708, 710, 712, 506, 508	30-7101, 7100, 7111, 7106, 7108	30-3805-20
Core Extension	MSD Dual Sync, 35" for Fr Mounted Distributor		708, 710, 712, 506, 508	30-7101, 7100, 7111, 7106, 7108	30-3805-21
Core Extension	GM DBW Pedal Adapter (GM PN: 10367117)	*30-3809 Core harness only	506, 508	30-7106, 7108	30-3809-00
Core Extension	GM DBW Throttle Body Adapter (GM PN: 12570790 & 12580760)	*30-3809 Core harness only	506, 508	30-7106, 7108	30-3809-01

AUXILIARY HARNESSSES & CABLES

Type	Infinity Platform	Infinity Part Numbers	Harness PN
Infinity Coil Adapter for use with Distributed Honda/Acura	All	All	30-3501-00
Infinity Auxiliary Plug Speed Density Extension	All	All	30-3510-00
Infinity O2 Sensor Extension Harness, 72"	All	All	30-3600
Infinity IP67 spec comms cable, 39"	All	All	30-3601
Infinity IP67 spec logging cable, 39"	All	All	30-3602
Infinity IP67 spec comms cable, 118"	All	All	30-3604
Infinity Volkswagen 1.8T Map Sensor Harness	All	All	30-3903-00

RECORD SETTER

Robert Tighe Racing's Infinity-tuned B-Series Pro Mod Honda drag car. Quickest & Fastest B-Series 7.38 @ 185.77.



ENGINEERED TO OUTPERFORM



Series 2 Plug & Play Programmable Engine Management Systems

Powerful Stand-Alone Engine Control That Plugs Into the Factory Wiring Harness!

AEM was the first company to offer complete engine control using a vehicle's factory wiring harness and sensors. Our Series 2 Plug & Play EMS combines robust construction with our proven AEMtuner Software to deliver total engine control for the racing masses.

AEM's Series 2 Plug & Play EMS plugs directly into a vehicle's factory ECU harness and requires no additional wiring or hardware. Windows™ compatible software (XP, Vista, 7, 8) simplifies copying, viewing and data manipulation.

- > Delivers complete control of your racecar's engine and driveline
- > Plugs into your racecar's factory wiring harness and uses existing sensors
- > Systems are unlocked and fully enabled—never pay for upgrades!
- > AEMnet enabled electronics
- > Outputs to 3rd party dashes and loggers
- > Start-up calibrations included
- > Flex Fuel capable

- > Variable cam control (4 cams)
- > 2MB internal data logger
- > Data analysis in AEMdata software
- > Sequential fuel injection
- > Electronic boost control
- > Enhanced programmable traction control features
- > Software-definable knock control
- > Two-step launch control
- > Configurable soft-cut rev limiters
- > Wet or dry nitrous control

**MOTOR
SPORTS
ONLY**

EMS-4 Universal Standalone Programmable EMS A Compact, Weatherproof Engine Management System Designed For 4-Cylinder Racing and Powersports Applications

AEM's EMS-4 Universal Standalone engine management system is designed for Powersports and 4-cylinder race vehicles. This affordable, lightweight, compact and powerful system features robust Series 2 EMS hardware in a weather and shock proof enclosure, with a 36-pin connector specifically designed to survive harsh racing environments.

- > Durable weather/shock proof enclosure
- > Compact size (4.8" x 4.55" x 1.44")
- > Light weight (7.2 ounces/204 grams)
- > Available flying-lead wiring harness simplifies installation
- > Runs on proven AEMtuner software
- > Works with Mag or Hall crank inputs
- > Can directly drive smart coils or an external igniter
- > 4 saturated injector drivers
- > 4 coil triggers
- > 8 general purpose Inputs/Outputs
- > O2 & knock inputs
- > 8 MB internal data logger
- > VSS Hall input
- > CAN data stream
- > USB comms port



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EMS-4 Wiring Harnesses

AEM's EMS-4 flying-lead wiring harnesses are available in 96" and mini configurations. See page 30 for application info.

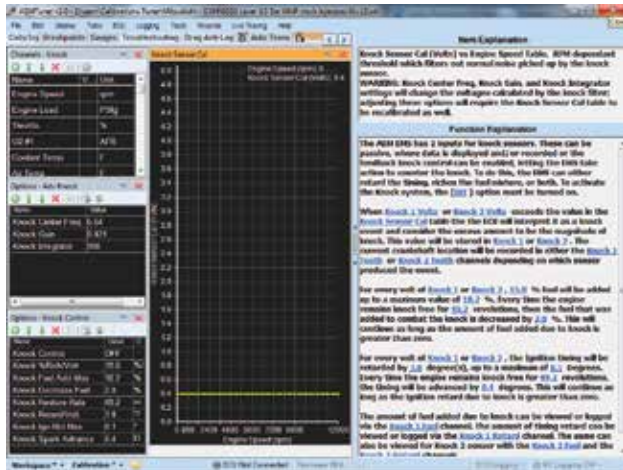


AEMtuner Software

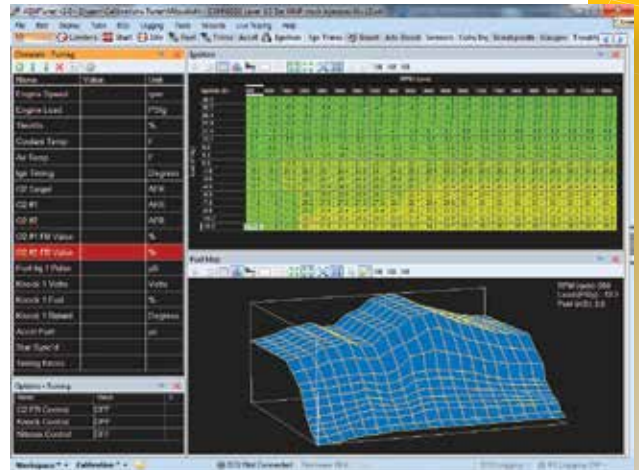
AEMtuner software is intuitive and highly adjustable. It allows tuners to program virtually any combination of engine control, power adders and auxiliary devices, and accurately delivers proper amounts of fuel and correct ignition timing for any boost level or operating condition.

- > Fully customizable workspace, tables and maps
- > Support pane delivers context sensitive help
- > Internal conflict detection for I/O assignments
- > Password protected maps
- > Compare calibrations for easy analysis
- > Data analysis using AEMdata (see page 6)

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Support Pane: The support pane delivers live, context sensitive help including explanation of items and functions. A link to worksheets from a given function is included for making adjustments.



Workspace: AEMtuner puts your tuning world in one space through a fully customizable workspace, allowing you to add what you need and hide what you don't. Password protection is included.

F/IC-6, F/IC-8 and Plug & Play F/IC Piggyback Engine Control for Aftermarket Boosted Vehicles

AEM's Fuel/Ignition Controllers allow racers to retard ignition and deliver accurate amounts of fuel without the need for outdated FMUs or "boost hiding" controllers. This system works parallel with most factory ECUs (OBD-compatible) on non direct-injected, gas engine, naturally aspirated or forced induction race vehicles (with or without variable cam timing). It prevents tuning limitations due to complex factory timing patterns. F/IC software is Windows compatible (XP, Vista, 7 and 8).



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EMS Accessories

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Serial Datastream Gauge Monitors 19 Channels

The AEM Serial Datastream gauge plugs into our Series 1 and 2 EMS systems only (NOT for use with Infinity or F/IC units).



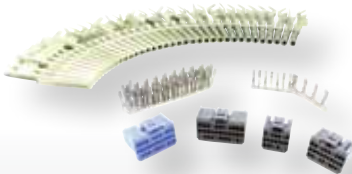
Series 2 AEMnet Adapter Kits

Connect your Series 2 EMS to other AEMnet enabled devices.



EMS Patch/Extension Harnesses

AEM's EMS Patch/Extension Harnesses make it easy to add ancillary devices like turbo timers, data loggers, gauges, F/IC, etc., without having to cut into your factory wiring harness.



Series 2 Plug & Pin Kits

AEM Plug & Pin Kits essentially allow you to "start over" with your harness to create a new harness or replace your existing factory harness using new plugs and pins.



Universal 12-Position Trim Pot

AEM's Universal 12-Position Trim Pot can be used to adjust a number of trims including ignition timing, fuel, boost and more! It can be used with virtually any Engine Management System.



Micro Relay Kit

AEM's 12 V Micro Relay kit includes relay, connector and contacts.

RECORD SETTER

Professional Awesome Racing's Infinity-tuned championship EVO uses an AQ-1 Data Logger, 380lph High Flow Fuel Pumps and AEM sensors. 13 wins in the last 15 time attack events, Fastest Limited Class car ever at Buttonwillow Raceway CW 13 with a time of 1:44.062, Fastest Limited Class car ever at Road Atlanta with a time of 1:31.717, Fastest Real Door Slammer 2015 Grassroots Motorsports Ultimate Track Car Challenge VIR 1:56.818.



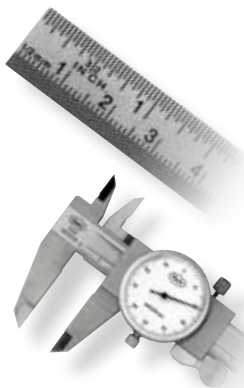
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Sensors & Connectors

AEM offers virtually every sensor you need for wiring additional outputs and/or upgrading your hardware over existing sensors, including pressure sensors (MAP and gauge), air, water and EGT temperature sensors, Flex Fuel sensors, wideband sensors and more.

Which Pressure Sensor is right for you?

There are many different tools that can be used for measurement, but the degree of accuracy is dependent upon the tool. For example, a ruler can measure distance with a good degree of accuracy, but for a more precise measurement a caliper should be used. The difference between a brass pressure sensor and a stainless steel pressure sensor is similar if we think about it in these terms:



Brass Pressure Sensor = Ruler

Use a Brass Pressure Sensor where you need a good reference to what pressure is being seen.

Example: Brass Pressure Sensor used for a Boost Gauge - Reference/Information for knowing manifold pressure, not for ECU calibration.

Stainless Pressure Sensor = Caliper

Use a SS Pressure Sensor where you need exact details of the pressure.

Example: MAP Sensor information for the ECU - Calibration/crucial information for the ECU.

Pressure/Temp Sensor Features:

- > Stainless-steel sensors accurate to +/- 1% of full scale (pressure sensors)
- > Brass sensors accurate to +/- 3% of full scale (pressure sensors)
- > High-quality sealed sensor housings are virtually impervious to automotive fluids (360-degree welded wetted area both stainless steel and brass)
- > Connector and pins included

What is the difference Between PSia and PSig sensors?

Absolute (PSia) Pressure Sensors

PSia pressure sensor readings include pressure from atmospheric conditions. The most common use for absolute pressure sensors is reading manifold pressure because they can measure vacuum. A PSia sensor will read about 14.7 PSI when the sensing element is exposed to atmospheric pressure at sea level.

Gauge style (PSig) Pressure Sensors

Gauge style pressure sensors reference pressure above atmospheric pressure. When exposed to atmospheric pressure, gauge style pressure sensors will read 0 psig. Gauge style pressure sensors are commonly used for oil pressure, fuel pressure, brake pressure, nitrous pressure etc.



NEW Ethanol Content Sensor

AEM has released two Fuel Ethanol Content (Flex Fuel) Sensor Kits, one with 3/8" barbed adapter fittings and one with -6AN to 3/8" adapter fittings. While many gas stations label flex fuel as E85, actual ethanol content can be much different. Using AEM's Flex Fuel Ethanol Content Sensor delivers the ability to determine the amount of fuel blend being used at any given time.

Part numbers on page 35.



SERIES 2/EMS-4 APPLICATIONS

These products may be used solely on vehicles used in sanctioned competition which may never be used upon a public road or highway, unless permitted by specific regulatory exemption .
It is the responsibility of the installer and/or user of this product to ensure that it is used in compliance with all applicable laws and regulations, and this product must not be purchased if the intent is to use it in an unlawful manner.

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EMS-4 Engine Management Systems

Part Number	Description
30-6905	Universal Programmable Engine Management System. EMS 4
30-2905-0	EMS 4 - Mini Harness. Pre-wired for Power, Ground, CAN & USB Coms
30-2905-96	EMS 4 - 96" Flying Lead Harness with Fuse and Relay Panel

Series 2 Plug & Play Programmable Engine Management Systems

Year	Model	Engine	Part Number
ACURA			
1997	CL	2.2L I4 [F22B1]	30-6060
1998	CL	2.3L I4 [F23A1]	30-6050
1999	CL 3.0L Swap	3.0L V6 [J30A1] Swap	30-6051
2001-2003	CL 3.2L Swap	3.2L V6 [J32A1] Swap Auto Harness Only	30-6051
1997	CL Premium	2.2L I4 [F22B1]	30-6060
1998-1999	CL Premium	2.3L I4 [F23A1]	30-6050
1992-1993	Integra GS	1.8L I4 [B18A1]	30-6040
1997-1999	Integra GS	1.8L I4 [B18B1]	30-6060
2000-2001	Integra GS	1.8L I4 [B18B1]	30-6050
1992-1993	Integra GS-R	1.7L I4 [B17A1]	30-6040
1994-1995	Integra GS-R	1.8L I4 [B18C1]	30-6040
1996-1999	Integra GS-R	1.8L I4 [B18C1]	30-6060
2000-2001	Integra GS-R	1.8L I4 [B18C1]	30-6050
1992-1993	Integra LS	1.8L I4 [B18A1]	30-6040
1994-1995	Integra LS	1.8L I4 [B18B1]	30-6040
1996-1999	Integra LS	1.8L I4 [B18B1]	30-6060
2000-2001	Integra LS	1.8L I4 [B18B1]	30-6050
1992-1993	Integra RS	1.8L I4 [B18A1]	30-6040
1994-1995	Integra RS	1.8L I4 [B18B1]	30-6040
1996-1998	Integra RS	1.8L I4 [B18B1]	30-6060
1995	Integra Special Edition	1.8L I4 [B18B1]	30-6040
1996	Integra Special Edition	1.8L I4 [B18B1]	30-6060
1997-1998	Integra Type R	1.8L I4 [B18C5]	30-6060
2000-2001	Integra Type R	1.8L I4 [B18C5]	30-6050
2002-2006	RSX	2.0L I4 [K20A3]	30-6030
2002-2003	RSX L	2.0L I4 [K20A3]	30-6030
2002-2004	RSX Type-S	2.0L I4 [K20A2]	30-6030
1999-2003	TL 3.2L Swap	3.2L V6 [J32A1] Swap	30-6051
2002-2003	TL Type-S 3.2L Swap	3.2L V6 [J32A2] Swap	30-6051
	K-Series Swap	2.0L I4 [K20A2 & K20A3] Excl. ESX & Accord	30-6030
DODGE			
1992-1996	Stealth R/T Turbo	3.0L V6 TURBO [6G72]	30-6311
EAGLE			
1995-1998	Talon TSi	2.0L I4 TURBO [4G63]	30-6310
HONDA			
1990-1993	Accord DX	2.2L I4 [F22A1]	30-6040
1994-1995	Accord DX	2.2L I4 [F22B2]	30-6040
1996-1997	Accord DX	2.2L I4 [F22B2]	30-6060
1998-2002	Accord DX	2.3L I4 [F23A5]	30-6050
1990-1991	Accord EX	2.2L I4 [F22A1]	30-6040
1990-1991	Accord EX	2.2L I4 [F22A4]	30-6040
1991-1993	Accord EX	2.2L I4 [F22A6]	30-6040
1994-1995	Accord EX	2.2L I4 [F22B1]	30-6040
1996-1997	Accord EX	2.2L I4 [F22B1]	30-6060
1998-2002	Accord EX	2.3L I4 [F23A1]	30-6050
1998-2002	Accord EX	2.3L I4 [F23A4]	30-6050
1990-1993	Accord LX	2.2L I4 [F22A1]	30-6040

Year	Model	Engine	Part Number
HONDA continued			
1994-1995	Accord LX	2.2L I4 [F22B2]	30-6040
1996-1997	Accord LX	2.2L I4 [F22B2]	30-6060
1998-2002	Accord LX	2.3L I4 [F23A1]	30-6050
1999-2002	Accord LX	2.3L I4 [F23A4]	30-6050
1991	Accord SE	2.2L I4 [F22A6]	30-6040
1999-2002	Accord V6 Swap	3.0L V6 [J30A1] Swap	30-6051
1993-1995	Civic del Sol S	1.5L I4 [D15B7]	30-6040
1996-1997	Civic del Sol S	1.6L I4 [D16Y7]	30-6060
1993-1995	Civic del Sol Si	1.6L I4 [D16Z6]	30-6040
1996-1997	Civic del Sol Si	1.6L I4 [D16Y8]	30-6060
1994-1995	Civic del Sol VTEC	1.6L I4 [B16A3]	30-6040
1996-1997	Civic del Sol VTEC	1.6L I4 [B16A2]	30-6060
1992-1995	Civic DX	1.5L I4 [D15B7]	30-6040
1996-1998	Civic DX	1.6L I4 [D16Y7]	30-6060
1999-2000	Civic DX	1.6L I4 [D16Y7]	30-6050
2001-2005	Civic DX	1.7L I4 [D17A1]	30-6030
1992-1995	Civic EX	1.6L I4 [D16Z6]	30-6040
1996-1998	Civic EX	1.6L I4 [D16Y8]	30-6060
1999-2000	Civic EX	1.6L I4 [D16Y8]	30-6050
2001-2005	Civic EX	1.7L I4 [D17A2]	30-6030
1996	Civic HX	1.6L I4 [D16Y5]	30-6060
1992-1995	Civic LX	1.5L I4 [D15B7]	30-6040
1996-1998	Civic LX	1.6L I4 [D16Y7]	30-6060
1999-2000	Civic LX	1.6L I4 [D16Y7]	30-6050
2001-2005	Civic LX	1.7L I4 [D17A1]	30-6030
1992-1995	Civic Si	1.6L I4 [D16Z6]	30-6040
1999-2000	Civic Si	1.6L I4 [B16A2]	30-6050
2002-2005	Civic Si	2.0L I4 [K20A3]	30-6030
2004-2005	Civic Value Package	1.7L I4 [D17A1]	30-6030
2002-2004	Odyssey V6 Swap	3.5L V6 [J35A4] Swap	30-6051
1997-2000	Prelude	2.2L I4 [H22A4]	30-6060
1992-1995	Prelude S	2.2L I4 [F22A1]	30-6040
1996	Prelude S	2.2L I4 [F22A1]	30-6060
1995	Prelude SE	2.3L I4 [H23A1]	30-6040
1990-1991	Prelude Si	2.1L I4 [B21A1]	30-6040
1992-1995	Prelude Si	2.3L I4 [H23A1]	30-6040
1996	Prelude Si	2.3L I4 [H23A1]	30-6060
1990-1991	Prelude Si 4WS	2.1L I4 [B21A1]	30-6040
1992-1994	Prelude Si 4WS	2.3L I4 [H23A1]	30-6040
1990-1991	Prelude Si ALB	2.1L I4 [B21A1]	30-6040
1997-2000	Prelude Type SH	2.2L I4 [H22A4]	30-6060
1993-1995	Prelude VTEC	2.2L I4 [H22A1]	30-6040
1996	Prelude VTEC	2.2L I4 [H22A1]	30-6060
2000-2003	S2000	2.0L I4 [F20C1]	30-6052
2004-2005	S2000	2.2L I4 [F22C1]	30-6052
2006-2008	S2000	2.2L I4 [F22C1] Drive-By-Wire	30-6053
	K-Series Swap	2.0L I4 [K20A3] Excl. ESX & Accord	30-6030
INFINITI			
1991-1993	G20	2.0L I4 [SR20DE] 50mm AEM Trigger Disc included. Some applications require the 54mm Part #30-8762	30-6600
1994-1996	G20	2.0L I4 [SR20DE]	30-6610
1999	G20	2.0L I4 [SR20DE]	30-6611
1994-1996	G20 T	2.0L I4 [SR20DE]	30-6610
1999	G20 T	2.0L I4 [SR20DE]	30-6611
MITSUBISHI			
1995-1996	3000GT Spyder VR-4	3.0L V6 TURBO [6G72]	30-6311
1991-1997	3000GT VR-4	3.0L V6 TURBO [6G72]	30-6311
2000-2002	Eclipse GS	2.4L I4 [4G64]	30-6310

Year	Model	Engine	Part Number
MITSUBISHI continued			
1995-1999	Eclipse GST	2.0L I4 TURBO [4G63]	30-6310
1995-1999	Eclipse GSX	2.0L I4 TURBO [4G63]	30-6310
2000-2002	Eclipse RS	2.4L I4 [4G64]	30-6310
2000-2002	Eclipse Spyder GS	2.4L I4 [4G64]	30-6310
1996-1999	Eclipse Spyder GST	2.0L I4 TURBO [4G63]	30-6310
2003-2005	Lancer Evolution VIII	2.0L I4 TURBO [4G63]	30-6310
2006	Lancer Evolution IX	2.0L I4 TURBO [4G63]	30-6320
2005	Lancer Evolution VIII MR	2.0L I4 TURBO [4G63]	30-6310
2006	Lancer Evolution IX MR	2.0L I4 TURBO [4G63]	30-6320
2005	Lancer Evolution VIII RS	2.0L I4 TURBO [4G63]	30-6310
2006	Lancer Evolution IX RS	2.0L I4 TURBO [4G63]	30-6320
2006	Lancer Evolution IX SE	2.0L I4 TURBO [4G63]	30-6320
NISSAN			
1988-1990	180SX S13	1.8L I4 TURBO [CA18DET] 76 Pins Japan	30-6620
1991-1993	180SX S13	2.0L I4 TURBO [SR20DET] 64 Pins Japan	30-6601
1994-1995	180SX S14	2.0L I4 TURBO [SR20DET] 64 Pins Japan	30-6601
1995	200SX	2.0L I4 [SR20DE] 88 Pins	30-6610
1995-1996	200SX	1.6L I4 [GA16DE] 88 Pins	30-6610
1997-1998	200SX	1.6L I4 [GA16DE] 88 Pins	30-6611
1998	200SX	2.0L I4 [SR20DE] 88 Pins	30-6611
1988-1990	200SX S13	1.8L I4 TURBO [CA18DET] 76 Pins	30-6620
1995-1997	200SX S14	2.0L I4 TURBO [SR20DET] 88 Pins Europe	30-6610
1998	200SX S14	2.0L I4 TURBO [SR20DET] 88 Pins Europe	30-6611
1995-1996	200SX SE	1.6L I4 [GA16DE] 88 Pins	30-6610
1997-1998	200SX SE	1.6L I4 [GA16DE] 88 Pins	30-6611
1995-1997	200SX SE-R	2.0L I4 [SR20DE] 88 Pins	30-6610
1998	200SX SE-R	2.0L I4 [SR20DE] 88 Pins	30-6611
1991-1993	240SX	2.4L I4 [KA24DE] 64 Pins. 50mm AEM Trigger Disc included. Some applications require the 54mm Part #30-8762	30-6600
1995	240SX	2.4L I4 [KA24DE] 88 Pins OBD 1	30-6610
1995-1998	240SX	2.4L I4 [KA24DE] 88 Pins OBD 2	30-6611
1991-1992	240SX LE	2.4L I4 [KA24DE] 64 Pins. 50mm AEM Trigger Disc included. Some applications require the 54mm Part #30-8762	30-6600
1997-1998	240SX LE	2.4L I4 [KA24DE] 88 Pins OBD 2	30-6611
1991-1994	240SX SE	2.4L I4 [KA24DE] 64 Pins. 50mm AEM Trigger Disc included. Some applications require the 54mm Part #30-8762	30-6600
1995	240SX SE	2.4L I4 [KA24DE] 88 Pins OBD 1	30-6610
1995-1998	240SX SE	2.4L I4 [KA24DE] 88 Pins OBD 2	30-6611
1990-1995	300ZX	3.0L V6 [VG30DE] 76 Pins	30-6620
1990-1995	300ZX 2+2	3.0L V6 [VG30DE] 76 Pins	30-6620
1990-1995	300ZX Turbo	3.0L V6 TURBO [VG30DETT] 76 Pins	30-6620
1995	Altima GXE	2.4L I4 [KA24DE] 88 Pins	30-6610
1996	Altima GXE	2.4L I4 [KA24DE] 88 Pins Exc. Cali Emissions	30-6610
1996	Altima GXE	2.4L I4 [KA24DE] 88 Pins Exc. Federal Emissions	30-6611
1997-1999	Altima GXE	2.4L I4 [KA24DE] 88 Pins	30-6611
1995	Altima SE	2.4L I4 [KA24DE] 88 Pins	30-6610
1996	Altima SE	2.4L I4 [KA24DE] 88 Pins Exc. Cali Emissions	30-6610
1996	Altima SE	2.4L I4 [KA24DE] 88 Pins Exc. Federal Emissions	30-6611
1997-1999	Altima SE	2.4L I4 [KA24DE] 88 Pins	30-6611
1995	Altima XE	2.4L I4 [KA24DE] 88 Pins	30-6610
1996	Altima XE	2.4L I4 [KA24DE] 88 Pins Exc. Cali Emissions	30-6610
1996	Altima XE	2.4L I4 [KA24DE] 88 Pins Exc. Federal Emissions	30-6611
1997-1999	Altima XE	2.4L I4 [KA24DE] 88 Pins	30-6611
1989-1995	Bluebird	2.0L I4 TURBO [SR20DET] 64 Pins. 50mm AEM Trigger Disc included. Some applications require the 54mm Part #30-8762	30-6600
1992-1994	Maxima SE	3.0L V6 [VE30DE] 76 Pins	30-6620

Year	Model	Engine	Part Number
NISSAN continued			
1991-1993	NX SE	1.6L I4 [GA16DE] 64 Pins. 50mm AEM Trigger Disc included. Some applications require the 54mm Part #30-8762	30-6600
1991-1993	NX SE	2.0L I4 [SR20DE] 64 Pins. 50mm AEM Trigger Disc included. Some applications require the 54mm Part #30-8762	30-6600
1991-1993	NX XE	1.6L I4 [GA16DE] 64 Pins. 50mm AEM Trigger Disc included. Some applications require the 54mm Part #30-8762	30-6600
1991-1993	NX XE	2.0L I4 [SR20DE] 64 Pins. 50mm AEM Trigger Disc included. Some applications require the 54mm Part #30-8762	30-6600
1990-1994	Pulsar GTi-R	2.0L I4 TURBO [SR20DET] 64 Pins. 50mm AEM Trigger Disc included. Some applications require the 54mm Part #30-8762	30-6600
1995-1996	Sentra	1.6L I4 [GA16DE] 88 Pins	30-6610
1995-1997	Sentra	2.0L I4 [SR20DE] 88 Pins	30-6610
1997-1998	Sentra	1.6L I4 [GA16DE] 88 Pins	30-6611
1991-1994	Sentra E	1.6L I4 [GA16DE] 64 Pins. 50mm AEM Trigger Disc included. Some applications require the 54mm Part #30-8762	30-6600
1995-1996	Sentra GLE	1.6L I4 [GA16DE] 88 Pins	30-6610
1997-1998	Sentra GLE	1.6L I4 [GA16DE] 88 Pins	30-6611
1991-1994	Sentra GXE	1.6L I4 [GA16DE] 64 Pins. 50mm AEM Trigger Disc included. Some applications require the 54mm Part #30-8762	30-6600
1995-1996	Sentra GXE	1.6L I4 [GA16DE] 88 Pins	30-6610
1997-1999	Sentra GXE	1.6L I4 [GA16DE] 88 Pins	30-6611
1994	Sentra Limited Edition	1.6L I4 [GA16DE] 64 Pins. 50mm AEM Trigger Disc included. Some applications require the 54mm Part #30-8762	30-6600
1991	Sentra SE	2.0L I4 [SR20DE] 64 Pins. 50mm AEM Trigger Disc included. Some applications require the 54mm Part #30-8762	30-6600
1991-1994	Sentra SE	1.6L I4 [GA16DE] 64 Pins. 50mm AEM Trigger Disc included. Some applications require the 54mm Part #30-8762	30-6600
1998-1999	Sentra SE	2.0L I4 [SR20DE] 88 Pins	30-6611
1991-1994	Sentra SE-R	2.0L I4 [SR20DE] 64 Pins. 50mm AEM Trigger Disc included. Some applications require the 54mm Part #30-8762	30-6600
1991-1994	Sentra XE	1.6L I4 [GA16DE] 64 Pins. 50mm AEM Trigger Disc included. Some applications require the 54mm Part #30-8762	30-6600
1995-1996	Sentra XE	1.6L I4 [GA16DE] 88 Pins	30-6610
1997-1999	Sentra XE	1.6L I4 [GA16DE] 88 Pins	30-6611
1988-1990	Silvia S13	1.8L I4 TURBO [CA18DET] 76 Pins Japan	30-6620
1991-1993	Silvia S13	2.0L I4 TURBO [SR20DET] 64 Pins Japan	30-6601
1994-1996	Silvia S14	2.0L I4 TURBO [SR20DET] 76 Pins Japan	30-6620
1989-1992	Skyline R32	2.0L I6 TURBO [RB20DET] 76 Pins Japan	30-6620
1993-1994	Skyline R33	2.0L I6 TURBO [RB20DET] 76 Pins Japan	30-6620
1993-1998	Skyline R33	2.5L I6 TURBO [RB25DET] 76 Pins Japan	30-6620
1989-1992	Skyline GTR R32	2.6L I6 TURBO [RB26DETT] 76 Pins Japan	30-6620
1993-1998	Skyline GTR R33	2.6L I6 TURBO [RB26DETT] 76 Pins Japan	30-6620
SUBARU			
2005-2006	Impreza WRX STI	2.5L H4 TURBO [EJ257]	30-6821
TOYOTA			
1993-1997	Supra	3.0L L6 [2JZGE]	30-6101
1993-1997	Supra Twin Turbo	3.0L L6 TURBO [2JZGTE]	30-6100

Fuel/Ignition Controllers

Part Number	Short Description	Extended Description
30-1960	Plug & Play F/IC	05-06 Scion tC
30-1910	F/IC 6 Channel	Mag or Hall Sensor
30-1911	F/IC 6 Channel	Mag Pickup Sensor. 80's-90's Dist. Honda
30-1912	F/IC 6 Channel	Mag Pickup Sensor. 2000-05 Honda S2000
30-1913	F/IC 6 Channel	Mag or Hall with Circuit Driver for Injector Load on Chrysler Vehicles
30-1930	F/IC 8 Channel	Universal 8 Channel
35-2911	F/IC Harness	Fuel/Ignition Controller Bypass Harness
35-2910-24	F/IC Harness	24" Fuel/Ignition Controller Flying Lead Harness

EMS Harnesses & Accessories

AEMnet Harnesses for Series 2 EMS	
Part Number	Description
30-3430	AEMnet Adapter for 30-6030
30-3431	AEMnet Adapter for 30-6040, 30-6310 & 30-6311
30-3432	AEMnet Adapter for 30-6050, 30-6051, 30-6052, 30-6053 & 30-6060
30-3433	AEMnet Adapter for 30-6100 & 30-6101
30-3434	AEMnet Adapter for 30-6300
30-3435	AEMnet Adapter for 30-6320
30-3436	AEMnet Adapter for 30-6600 & 30-6601
30-3437	AEMnet Adapter for 30-6610, 30-6611 & 30-6620
30-3438	AEMnet Adapter for 30-6820 & 30-6821
35-3440-F	AEMnet Female Termination Plug
35-3440-M	AEMnet Male Termination Plug
ECU Patch/Extension Harnesses	
Part Number	Description
Please refer to our website for detailed application information.	
30-2980	Ford & Mazda, 1.8, 1.9, 2.0, 3.0, 3.5, 6.0TD, 6.8, 7.3TD, 7.5
30-2981	Chrysler, Dodge & Jeep, 2.0, 2.4, 2/7, 3.0, 3.5, 3.7, 3.9, 4.0, 4.7, 5.7, 5.9, 6.1
30-2982B	Acura & Honda
30-2983	Acura, Dodge, Eagle, Lexus, Mazda, Mitsubishi, Subaru & Toyota. 97-98 Subaru Forester EJ20G, 92-96 Subaru Impreza EJ20G, 90-94 Subaru Legacy EJ20G, 93-96 Subaru Legacy EJ20H & 90-93 Supra 1JZGTE Japanese
30-2983C	Acura, Dodge, Honda, Mazda, Mitsubishi, Subaru & Toyota. 96-98 Subaru Impreza EJ20K & 96-98 Subaru Legacy EJ20R & EJ20H with M/T
30-2985	Acura & Honda
30-2986	Acura & Honda
30-2986C	Acura & Honda
30-2986CD	Acura & Honda
30-2988	Pontiac, Scion, Subaru & Toyota
30-2990	Mitsubishi. 03-04 Mitsubishi Evolution VIII RHD European & 05-06 Mitsubishi Evolution IX European
30-2991	Infiniti & Nissan
30-2993	Ford & Lincoln, 4.2, 4.6, 5.4
30-2995	ECU Extension/Patch Harness. Infiniti & Nissan. 91-99 Nissan 180SX, 89-95 Nissan Bluebird, 90-94 Nissan Pulsar GTi-R, 91-93 Nissan Silvia S13, 97-98 Nissan Silvia S14, 93-98 Nissan Silvia S14 EURO & 99-02 Nissan Silvia S15. ALL WITH SR20DET
30-2996	ECU Extension/Patch Harness. Infiniti & Nissan
30-2997	Mazda
30-2998	89-93 Nissan 180SX CA18DET, 88-91 Nissan Silvia S13 CA18DET, 93-96 Nissan Silvia S14 SR20DET & 89-04 Nissan Skyline
Series 2 Plug & Pin Kits	
Part Number	Description
35-2610	Plug & Pin Kit for EMS 30-1010's/ 1020/ 1050's/ 1060/ 6050's/ 6060. Includes: A, B, C & D Connectors, 15 X Large Contacts & 100 X Small Contacts
35-2611	Plug & Pin Kit 30-1002/ 1040's/ 1310's/ 1710/ 1720/ 6040's/ 6310's/ 6710/ 6720. Includes: A, B, C & D Connectors, 16 X Large Contacts & 60 X Small Contacts
35-2612	Plug & Pin Kit for 30-1500U. Includes: A, B & C Connectors & 105 X Small Contacts
30-2905-0	EMS 4 - Mini Harness. Pre-wired for Power, Ground, CAN & USB Coms
30-2902	Universal EMS Plug & Pin Kit. 30-1900U & 30-1902U. Includes: Connector & 104 X Contacts
30-2020	Bosch Injector Plug Kit 4 Pack. Includes: 4 Bosch Injector Connectors & 10 Pins
3-1002-16	16 Pin Connector for EMS 30-1010's/ 1020/ 1050's/ 1060/ 6050's/ 6060

Series 2 Plug & Pin Kits continued	
Part Number	Description
3-1002-25	25 Pin Connector for EMS 30-1010's/ 1020/ 1050's/ 1060/ 6050's/ 6060
3-1002-31	31 Pin Connector for EMS 30-1010's/ 1020/ 1050's/ 1060/ 6050's/ 6060
3-1002-32	32 Pin Connector for EMS 30-1010's/ 1020/ 1050's/ 1060/ 6050's/ 6060
3-1002-S	Small Contact for EMS 30-1010's/ 1020/ 1050's/ 1060/ 6050's/ 6060
3-1002-L	Large Contact for EMS 30-1010's/ 1020/ 1050's/ 1060/ 6050's/ 6060
35-2613	Bosch LSU 4.2 Wideband Connector Kit. Includes: Bosch LSU 4.2 Connector, 7 X Wire Seals & 7 X Contacts
EMS Accessories	
Part Number	Description
30-4300	Serial Data Stream Gauge
30-2056	Universal 12 Position Trim Pot Switch
30-2060	Micro-Relay Kit. Includes: Micro-Relay, Connector, 2 Large Pins & 2 Small Pins
30-2400	Boost Control Solenoid Kit. Includes: Boost Control Solenoid, 2 X 1/8" NPT to 3/16" Barb Adapter & Muffler
30-2840	4 Channel Coil Driver
30-8760	CAS Trigger Disk 50mm OD. NISSAN: SR20DET RWD / KA24DE
30-8761	CAS Trigger Disk 50mm OD. NISSAN: RB25DET and some RB26
30-8762	CAS Trigger Disk 54mm OD. NISSAN: Pulsar GTiR
35-3001	72" Serial "EMS Comms" Cable
35-3008	10' USB Comms Cable

Sensors

Part Number	Description
30-2001	Bosch LSU 4.2 Wideband UEGO "Replacement" Sensor
30-2002	Bosch LSU 4.2 Wideband UEGO Installation Kit. Includes: Bosch LSU 4.2 Wideband UEGO Sensor, Weld-On Bung, Connector, Wire-Seals & Pins
30-2010	Air Temp Sensor Kit. 3/8"NPT. Includes: Air Temp Sensor, 3/8"NPT Aluminum Bung, Connector & Pins
30-2011	Water Temp Sensor Kit. 3/8"NPT. Includes: Water Temp Sensor, 3/8"NPT Aluminum Bung, Connector & Pins
30-2012	Water Temp Sensor Kit. 1/8"NPT. Includes: Water Temp Sensor, Plug, Pins & Pin Lock
30-2050	RTD Temperature Sensor Kit. Inconel Body. M14 X 6H. Includes: RTD Temperature Sensor with Male Thread, Weld-On Bung Female Thread, Connector & Pins.
30-2065	K-Type Closed Tip Thermocouple Sensor Kit. Inconel Sheath. 1/8" NPT Compression Fitting
30-2066	K-Type Closed Tip Thermocouple 10' Wiring Extension Kit. Includes: 10' Wiring Extension, 2 X 4-40 Hex Nut, 2 X 4-40 Screw & 6" Heat Shrink Tubing
30-2130-15	15 PSia or 1 Bar Stainless Sensor Kit. 1/8" NPT Male Thread
30-2130-30	30 PSia or 2 Bar Stainless Sensor Kit. 1/8" NPT Male Thread
30-2130-50	50 PSia or 3.5 Bar Stainless Sensor Kit. 1/8" NPT Male Thread
30-2130-75	75 PSia or 5 Bar Stainless Sensor Kit. 1/8" NPT Male Thread
30-2130-100	100 PSig Stainless Sensor Kit. 1/8" NPT Male Thread
30-2130-150	150 PSig Stainless Sensor Kit. 1/8" NPT Male Thread
30-2130-500	500 PSig Stainless Sensor Kit. 1/8" NPT Male Thread
30-2130-1000	1000 PSig Stainless Sensor Kit. 1/8" NPT Male Thread
30-2130-2000	2000 PSig Stainless Sensor Kit. 1/8" NPT Male Thread
30-2131-15G	15 PSig Brass Sensor Kit. Brass Sensor Body. 1/8" NPT Male Thread
30-2131-30	30 PSia or 2 Bar Brass Sensor Kit. 1/8" NPT Male Thread
30-2131-50	50 PSia or 3.5 Bar Brass Sensor Kit. 1/8" NPT Male Thread
30-2131-75	75 PSia or 5 Bar Brass Sensor Kit. 1/8" NPT Male Thread
30-2131-100	100 PSig Brass Sensor Kit. NPT Male Thread
30-2131-150	150 PSig Brass Sensor Kit. 1/8" NPT Male Thread
30-2200	Ethanol Content Flex Fuel Sensor for Flex Fuel Failsafe Gauge, 3/8" Barbed Fittings
30-2201	Ethanol Content Flex Fuel Sensor for Flex Fuel Failsafe Gauge, -6 AN Fittings
30-2204	K-Type Thermocouple Amplifier 4 Channel
30-2065	K-Type Closed Tip Thermocouple Sensor Kit. Inconel Sheath. 1/8" NPT Compression Fitting. Includes: K-Type Closed Thermocouple Sensor, 1/8" Compression Fitting & Ring Terminal Harness
30-2066	K-Type Closed Tip Thermocouple 10' Wiring Extension Kit. Includes: 10' Wiring Extension, 2 X 4-40 Hex Nut, 2 X 4-40 Screw & 6" Heat Shrink Tubing



AQ-1 Data Logger

Powerful. Affordable. Easy to Use.

Looking for an alternative to expensive data acquisition? You've found it. The AQ-1 installs easily, can read live parameters from ancillary sensors, AEMnet enabled devices like the new Vehicle Dynamics Module (VDM), GPS and more, and put them into a single log to make it easy to view.

The AQ-1 can log at up to 1000HZ (1000 samples/second) per channel and has a removable SD card for virtually unlimited logging (2GB included, up to 32GB). An internal 3-axis accelerometer and RS-232 serial input is included for a GPS device for track mapping. AEMdata, our data software analysis is free.

- > Four analog inputs for measuring frequency (RPM), 0-5 V or 0-16.5 V
- > Four 0-5 V analog inputs with optional pullup resistor for RTD/Thermistor-style sensor
- > Three switched digital inputs, 16.5 V MAX
- > AEMnet connection included for easy connection to AEMnet enabled devices (daisy chain)
- > CAN bus IN for decoded channels. Contact us for more info!
- > Compact size (4.8" x 4.55" x 1.44")



CHOOSE ANY FOUR

Channels 1-4 - 0-5V Sensors, RTD/Thermistor Sensors

- | | |
|-------------------------------|--------------------------|
| Air/Fuel Ratio 1 | 0-5V Oil Pressure |
| Air/Fuel Ratio 2 | 0-5V Clutch Pressure |
| Air/Fuel Ratio 3 | 0-5V Brake Pressure |
| Air/Fuel Ratio 4 | 0-5V Shock Travel Sensor |
| 0-5V Boost | Air Temperature |
| 0-5V Boost After Intercooler | Coolant Temperature |
| 0-5V Boost Before Intercooler | Trans Temperature |
| 0-5V MAP | EGT 1 |
| 0-5V Crank Case Pressure | EGT 2 |
| 0-5V Fuel Pressure | EGT 3 |
| | EGT 4 |

CHOOSE ANY FOUR

Channels 5-8 - 0-5V Sensors, Frequency

- | | |
|-------------------------------|--------------------------|
| Air/Fuel Ratio 1 | 0-5V Fuel Pressure |
| Air/Fuel Ratio 2 | 0-5V Oil Pressure |
| Air/Fuel Ratio 3 | 0-5V Clutch Pressure |
| Air/Fuel Ratio 4 | 0-5V Brake Pressure |
| 0-5V Boost | 0-5V Shock Travel Sensor |
| 0-5V Boost After Intercooler | RPM |
| 0-5V Boost Before Intercooler | Driveshaft Speed |
| 0-5V MAP | Wheel Speed |
| 0-5V Crank Case Pressure | |

AQ-1 OBDII Data Logger

Plug It In and Start Data Logging/Read and Clear Trouble Codes

For just a little bit more, the AQ-1 OBDII Data Logger has the ability to log data from a vehicle's OBDII port in addition to all of the features found in the standard AQ-1, as well as clear trouble codes.

Available 2016.



AQ-1 Wiring Harnesses

Make and Easy Connection and Start Logging

AEM has harnesses specifically designed for wiring its AQ-1 Data Loggers into your racecar. They feature weather proof connections and labeled wires for ease of installation.



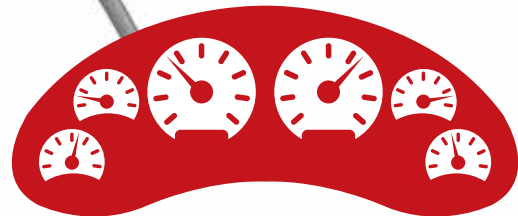
AQ-1 Data Logger

Part Number	Description
30-2500	AQ-1 Data Logging System
30-2501	AQ-1 Data Logging System with OBDII Connectivity
30-2906-0	AQ-1 Mini Harness.
30-2906-18	AQ-1 18" Flying Lead Wiring Harness
30-2906-96	AQ-1 96" Flying Lead Wiring Harness
30-2901-0	OBDII Mini Harness
30-2901-18	AQ-1 OBDII 18" Flying Lead Wiring Harness
30-2901-96	AQ-1 OBDII 96" Flying Lead Wiring Harness
35-3440-F	AEMnet Female Termination Plug
35-3440-M	AEMnet Male Termination Plug

See page 35 for sensor part numbers.

CANBUS OUT FOR - ENGINE MANAGEMENT & DASHES

(Available 2016)



CHOOSE THREE

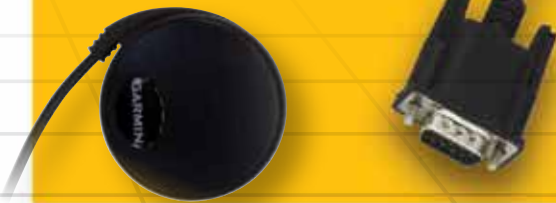
3 Switched Inputs

Clutch Switch
Nitrous Switch

Brake Switch

Serial/GPS

GPS for Speed and Position



EXPAND INPUTS USING AEMNET



X-Series Wideband UEGO Air/Fuel Ratio Sensor Controllers

The Fastest Responding Widebands!

X-Series Widebands are built upon unique, patent-pending X-Digital technology and were the fastest responding wideband air/fuel ratio sensor controllers in independent tests against 17 major wideband air/fuel competitors.

X-DIGITAL TECHNOLOGY

X-Digital wideband technology gives these sensor controllers the ability to read and report values more quickly than other widebands, which can help provide more optimized engine tuning and a safer overall operating condition. The controller's high speed digital implementation ensures no loss of signal fidelity and full transient response, making it able to identify the slightest fluctuations in AFR and output them in full value.

WHY RESPONSE TIME MATTERS

Faster response time improves wideband feedback control, and can provide a safer, more powerful and accurate tune. AEM's X-Series Wideband Sensor Controllers can reduce deadtime so you can improve the performance of a vehicle through more accurate AFR tuning.



PN 30-0300

X-SERIES WIDEBAND UEGO AFR GAUGE

The X-Series Wideband UEGO AFR Gauge measures 2 1/16" (52mm) in diameter, and features a modern, visually striking faceplate and new seven-segment display that is 87% larger than the 30-4110 AEM Wideband Gauge's segment display. This creates the perception of a larger overall gauge, but in a common 52mm size for easy mounting. Its slim depth (0.825-inches gauge) and ultra slim cup depth of .200-inches dramatically increases its application base and potential mounting locations.

FACTORY OR FREE-AIR CALIBRATION, IT'S YOUR CHOICE!

X-Series Wideband Sensor Controllers support the popular Bosch 4.9LSU sensor and can utilize both the factory calibration resistor and free-air calibration methods. This allows users to take advantage of the precise factory resistor calibration when a sensor is new but then allows for free-air calibrations if the user desires when the sensor ages. It's the perfect marriage of simplicity and accuracy!

X-SERIES INLINE WIDEBAND UEGO SENSOR CONTROLLER

The X-Series Inline Wideband UEGO Controller features a weather-resistant, low-profile enclosure with status LEDs. It is ideal for users who do not need a gauge display and want the fastest response time when data logging or for feedback control when tuning with an engine management system.



FEEDBACK CONTROL AND DATA LOGGING

X-Series Wideband Sensor Controllers include a 0-5v and RS232 Serial Port output for feedback control and data logging, and an AEMnet (CANbus) output for data logging and daisy chaining up to 16 X-Series Widebands together to monitor and record AFR in multiple cylinders. It supports vehicle/system voltages up to 16V, and can be used on EFI or carbureted applications. It's perfect for use with dynamometers. X-Series Widebands can be used on gasoline, methanol, ethanol, propane, CNG and Diesel engines.

X-SERIES WIDEBAND UEGO AFR GAUGE & INLINE CONTROLLER FEATURES:

- > Independently tested as the fastest responding wideband UEGO AFR sensor controllers vs. 17 other wideband systems
- > Includes Bosch 4.9LSU wideband UEGO sensor
- > Factory calibrated resistor does not require free-air calibration, but technology allows for free-air calibration as sensor ages if user desires
- > Compatible with vehicle/system voltages up to 16V
- > 0-5V & RS232 for data logging and feedback control, AEMnet (CANbus) for data logging and daisy-chaining multiple controllers up to 16 cylinders
- > Auto dimming feature (gauge)

X-Series Inline Wideband UEGO Controller, PN 30-0310.



52mm gauge diameter and slim 0.825" gauge depth. Gauge cup depth under 1/4" deep. Locking connectors ensure a positive connection between the harnesses and gauge and a single board design adds to the new gauge's robustness.



Use the buttons on the gauge face to change AFR values for different fuels, Lambda or O2%.



Change the center display AFR values to display AFR in tenths or hundredths of a percent.



Change the CAN message ID when linking multiple X-Series Wideband Controllers up to 16 cylinders.



A black bezel and black dual-faced faceplate for fuel and Lambda are included, and an optional silver faceplate with white dual-faced fuel/Lambda faceplate is available (PN 30-0300-ACC, sold separately)

What is a Wideband UEGO Sensor Controller?

AEM's Wideband UEGO (Universal Exhaust Gas Oxygen, pronounced "You-Way-Go") Controllers are powerful, cost effective tuning tools that allow users to accurately monitor the Air/Fuel Ratio (AFR) of an engine.

Why Use a Wideband Sensor Controller?

Accurate AFR data is critical when tuning an engine. Running rich (very low air/fuel ratio, excessive fuel) can cause a loss in power, while running too lean (very high air/fuel ratio, not enough fuel) may result in serious engine damage. Using a wideband controller during the tuning process allows you to monitor AFR and adjust tuning parameters to optimize them for maximum power and efficiency. AEM has a comprehensive line of highly accurate, reliable wideband controllers that can help ensure your vehicle is optimally tuned.

Bosch Sensors

AEM uses Bosch 4.2LSU & 4.9LSU sensors for their speed and accuracy. Sensor kits are available that include Stainless Steel Tall Manifold Bung (see page 42).

Can I Change The AEM UEGO Sensor's Connector?

No. There is a laser-etched, calibrated resistor in the sensor's connector body. This resistor is specifically created for the exact sensor that it is attached to. Modifying this will invalidate the sensor's output.

AFR Value Range (Display and Read) for all AEM Wideband AFR Controllers.

Digital And Analog Wideband UEGO AFR Gauges

A Gauge and Wideband Sensor Controller in One Unit!

AEM's legendary Wideband UEGO AFR Gauges unite accuracy, speed and control with an easy to read interface.

Our digital gauge-type wideband sensor controller features a digital LED display and sweeping LED "needle" that changes colors as AFR changes from rich to lean.

Our analog gauge-type wideband sensor controller features 320 degrees of resolution for detecting even a tenth of a point change in AFR, and has a high-speed electric stepper motor for lightning-fast needle movement. It features seven (7) user-selectable backlighting colors that allow you to match it to most factory gauge clusters. As with all of our Wideband Controllers, they are fast and accurate.

- > Interchangeable black/white faceplates and black/silver bezels included
- > 52mm (2-1/16") gauge housing
- > User-definable backlighting (Analog Only)
- > 0-5 V analog output (10-20 AFR range for 30-4110)



Tim Grey Racing's Infinity-tuned EatSleepRace All Motor Civic, 9.89 @ 138 MPH.

Wideband Failsafe Gauges

Displays Air/Fuel Ratio and Boost or Vacuum and Can Save Your Engine if it Runs Lean!

The Wideband Failsafe Gauge is two gauges in one, and so much more. It delivers the ultimate combination of monitoring device, wideband sensor control for engine tuning and engine protection. It monitors and displays both AFR and manifold pressure (up to 29 PSI boost).

It's also a data logger that internally logs RPM, AFR and boost/vacuum. Logs are viewable in AEMdata data analysis software.

What makes it unique is that it can save your engine if AFRs fall outside of user defined constraints. The gauge's failsafe strategy is completely user definable; from as simple as making the gauge flash to cutting timing, boost or switching to a safety map using a standalone ECU.

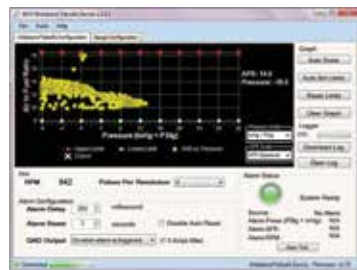


MOTOR SPORTS ONLY



NEW! Flex Fuel Failsafe Gauge Adds Flex Fuel Content to the Center Display

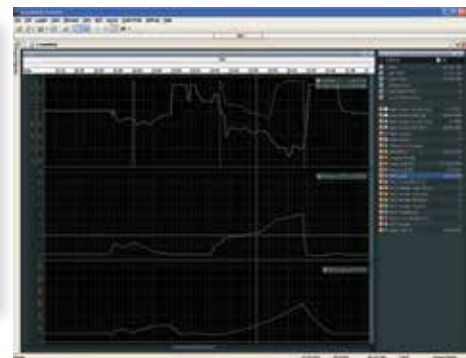
Show AFR, Boost and Flex Fuel Content all on one Gauge, plus have the protection of accurate, responsive Failsafe Technology (requires sensor, sold separately).



Set your AFR range vs. boost/vacuum to create a safe operating window.



Choose displayed parameters on the OLED screen/bar graph, set the alarm and adjust lighting for a custom look (6 faceplates included).



View logged RPM, AFR and boost/vacuum in AEMdata.

- > Failsafe technology can save your engine if it runs lean
- > Bosch Wideband UEGO sensor and weld-in bung included
- > On-Board 3+ hour Datalogging
- > Logs RPM, AFR and MAP
- > Intuitive set up software (PC based with USB connectivity)
- > Interchangeable black/white faceplates and black/silver bezels
- > 0-5 V analog outputs for AFR & MAP
- > Data analysis using AEMdata software
- > AEMnet compatible
- > 52mm (2-1/16") gauge housing



4-Channel Wideband UEGO Controller The Ultimate Tool for Monitoring and Controlling Individual Cylinder Fuel Trims

AEM's 4-Channel Wideband Controller delivers precise feedback of each cylinder's AFR, providing tuners with the ability to tune each individual cylinder to a targeted AFR for maximum engine power and safe operating condition.

The 4-Channel Wideband UEGO Controller will work on up to 12 cylinders by daisy chaining multiple units together via AEMnet (see page 22). The system can be integrated with almost any data logger or engine management system through four differential analog outputs or the AEMnet datastream output.

**MOTOR
SPORTS
ONLY**

- > Ideal for engine dynos!
- > Two status lights per sensor for error detection and operating status
- > Compact (4.8" x 4.55" x 1.44"), weather & shock proof enclosure and harness
- > Accurate to 0.1 AFR
- > Specially designed stainless steel bungs (see below)
- > Four 0-5v outputs & AEMnet enabled CAN output



Exhaust Backpressure Compensation Kit for Boosted Applications!

AEM's innovative exhaust backpressure compensation kit allows the wideband sensors to be mounted in each exhaust runner before the turbocharger and deliver accurate AFR readings. Sold separately.

Stainless Steel Tall Manifold Bungs

These bungs are designed specifically for use on forced induction vehicles using the 4-Channel Wideband UEGO Controller. The tall design keeps the sensor body cool and reduces restriction, and the fins enhance cooling. Sold separately.



No Weld Bungs

No welding equipment? No problem! AEM's no-weld bungs make it easy to install your wideband UEGO air/fuel sensor using a drill and the supplied hardware. Fits 1.75" to 3.5" exhaust pipe diameters.



Bosch 4.9LSU Replacement Sensor

Replacement sensor for Digital Wideband Controller Gauge and X-Series Widebands.



Bosch 4.2LSU Replacement Sensor

Replacement sensor for Infinity ECU, 4-Channel Wideband UEGO Controller and Wideband/Flex Fuel Failsafe.

Wideband UEGO Sensor Controllers/Gauge Sensor Controllers Applications

X-Series Wideband UEGO Controllers	
Part Number	Description
30-0300	X-Series Digital Wideband UEGO Gauge Controller
30-0310	X-Series Digital Inline Wideband UEGO Controller
Wideband Failsafe Gauge/Flex Fuel Failsafe Gauge	
Part Number	Description
30-4900	Wideband Failsafe Gauge
30-4910	Flex Fuel Wideband Failsafe Gauge
30-3439	AEMnet Adapter for Wideband Failsafe 30-4900 & 30-4910
35-3440-F	AEMnet Female Termination Plug
35-3440-M	AEMnet Male Termination Plug
4-Channel Wideband UEGO Controller	
Part Number	Description
30-2340	4 Channel Wideband UEGO Controller
30-2340-N	4 Channel Wideband UEGO Controller - For use with NASCAR McLaren ECU via CAN
4-Channel Wideband UEGO Accessories	
Part Number	Description
30-2064	Exhaust Back Pressure Sensor Install Kit
30-2063	Wideband UEGO Sensor with Stainless Tall Manifold Bung Install Kit - 4 Channel Wideband
30-4008	4.2LSU Stainless Tall Manifold Bung
30-4008-4PK	Stainless Tall Manifold Bung - 4 Pack
Single Channel Wideband UEGO Controller Gauges	
Part Number	Description
30-4110	Digital Wideband UEGO Gauge
30-5130	Analog Wideband UEGO Gauge. 8.5-18 Gasoline AFR
30-5143	Analog E85 Wideband UEGO Gauge. 5.7-11.9 E85 AFR
30-3421	Digital to Analog UEGO Wideband Gauge Wiring Conversion; 30-4400 to 30-5130 & 30-5143
Inline Single Channel Wideband UEGO Controller	
Part Number	Description
30-2310	Inline Wideband UEGO Controller
No-Weld O2 Sensor Bung Mounts	
Part Number	Description
30-2355-200	1.75"-2" No-Weld O2 Sensor Mount
30-2355-250	2.25"-2.5" No-Weld O2 Sensor Mount
30-2355-300	2.75"-3" No-Weld O2 Sensor Mount
30-2355-350	3.25"-3.5" No-Weld O2 Sensor Mount

Sensors and Accessories

Part Number	Description
30-2001	Bosch LSU 4.2 Wideband UEGO "Replacement" Sensor
30-2004	Bosch 4.9LSU Wideband UEGO "Replacement" Sensor
30-2200	Ethanol Content Flex Fuel Sensor for Flex Fuel Failsafe Gauge, 3/8" Barbed Fittings
30-2201	Ethanol Content Flex Fuel Sensor for Flex Fuel Failsafe Gauge, -6 AN Fittings
35-4001	O2 Sensor Bung Plug
35-4005	O2 Sensor Bung Mild Steel
30-8444	Water-Resistant Gauge Boot (30-4110, 30-5130 & 30-5143 only)

RECORD SETTER

ATI Performance Products COPO Camaro (008). Infinity ECU, dual 4-Channel Wideband UEGO Controllers and High Output Smart Coils on a Precision Racing Technologies 388ci, Whipple-charged engine. Personal best 7.92 @ 173 MPH, Yellowbullet Nationals 2015. NHRA SSA/A Class Record 2014.



Water Methanol Injection for Gas and Diesel

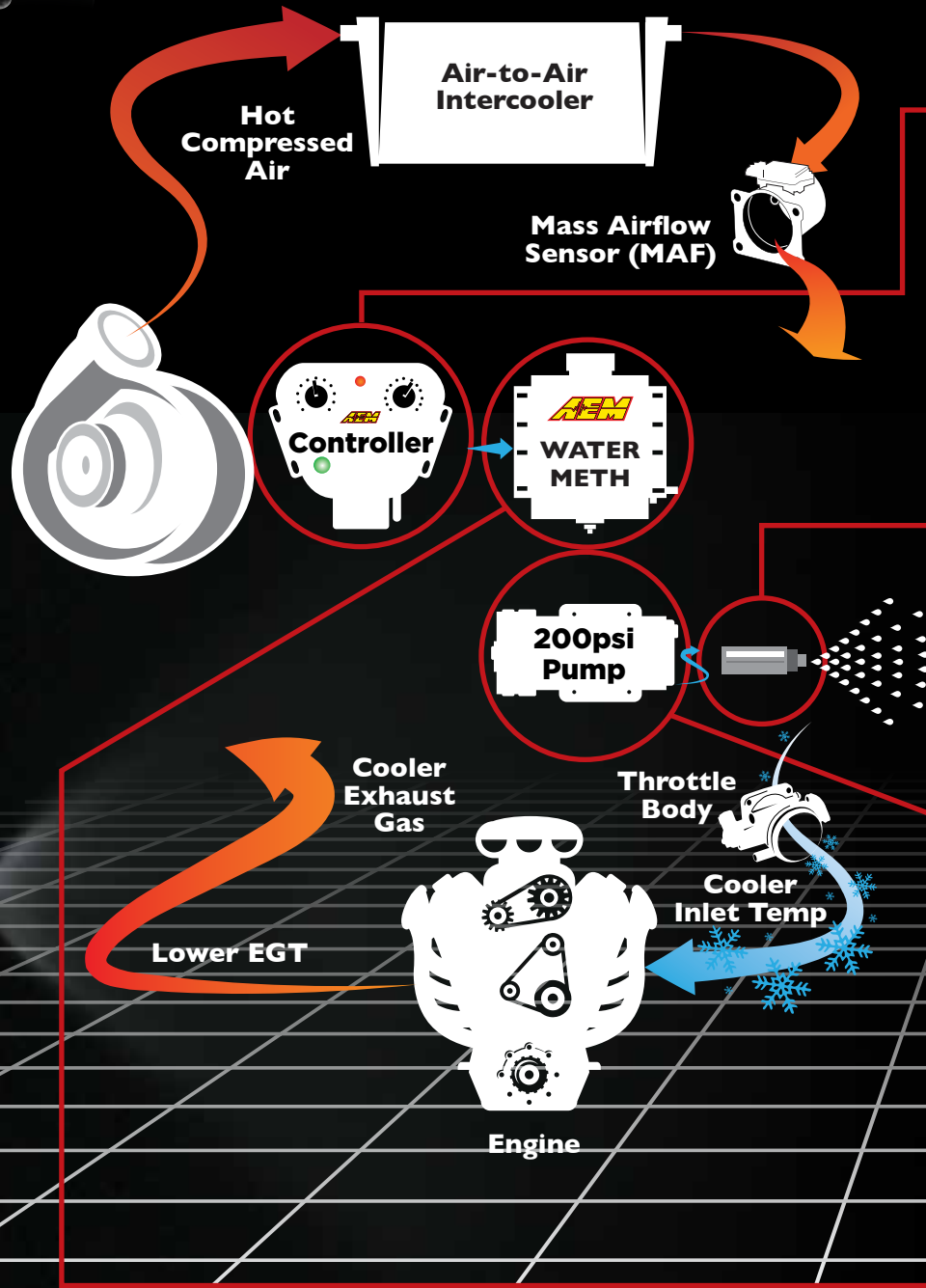
Redesigned Systems Support High-Compression NA Engines and All Boost Levels!

On gasoline engines, water/methanol injection reduces air inlet temperatures (AITs), reduces detonation (or knock) and reduces carbon deposits through a steam cleaning effect in the combustion chamber. It's like using race gas when you are running pump gas.

In Diesel engines, water/methanol injection reduces AITs, enhances combustion chamber cooling and efficiency, and reduces exhaust gas temperatures which reduces soot and enhances turbo/engine longevity.



MOTOR SPORTS ONLY



AEM Water/Methanol Injection controllers feature large, turn-resistant knobs and larger numbering to easily set accurate start and full activation points, with covered status LED and test buttons for added splash resistance. A plug is integrated into the controller housing for mating to the redesigned wiring harness's positive-lock connector. The Boost Dependent controller housing has a molded-in, barbed nipple to accept a boost hose and a wiring legend on the back (35 PSI Gas/40 PSI HD Diesel). The Multi Input Controller has dipswitches in the back for setting flow based on MAF, MAP or IDC. Both controller housings feature an easy to access integrated fuse and molded mounting tabs.



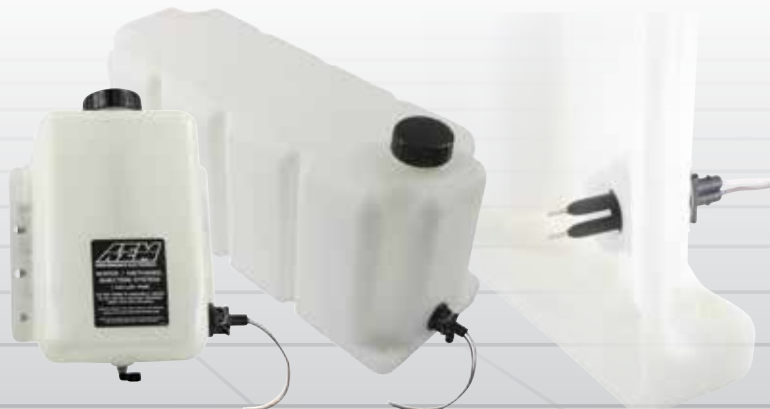
AEM includes one precision-machined billet injector for gasoline Water/Methanol Injection kits and two nozzles for its WMI Diesel Kits. It features an integral check valve to prevent unintended fluid flow. Three billet injector nozzles are included for matching water/methanol flow to an engine's horsepower output.



AEM's internally-bypassed, 200 PSI water/methanol injection pump does not cycle on and off and provides quiet, smooth operation. It features robust construction including integral hose fittings, EPDM seals and a Santoprene diaphragm that provides consistent and reliable fluid delivery.



AEM's gas Water/Methanol Injection Systems are available with a compact 1 gallon tank for gas kits and 5 gallon tank for Diesels. A more accurate, conductive low level fluid sensor is integrated into the tank and features a positive lock connector with color-matched wires to the wiring harness. The sensor eliminates any chance of incorrect readings due to interference from debris.



WATER/METHANOL INJECTION SYSTEMS

AEM's Water/Methanol Injection Systems utilize robust hardware and combine it with more advanced features than any other comparably priced system. Our systems feature multiple controller designs to work with low boost engines (35 PSI gas & 40 PSI Diesel) high boost gas and Diesel engines, and high-compression naturally aspirated engines.



30-3300 One gallon system for gas engines. Boost-Dependent Controller shown. Multi-Input Controller available for high boost and high-compression naturally aspirated engines.



30-3301 HD Diesel system with Boost-Dependent Controller shown

- > Boost Dependent Controllers for low boost gas and turbo Diesel
- > Multi Input Controllers for high boost via external MAP sensor, or high compression NA via MAF or IDC
- > Heavy-duty high-pressure injection pump with integral fittings, Santoprene diaphragm and EPDM seals to resist corrosion
- > Machined billet injector(s) (1 in gas and 2 in Diesel kit) with integral check valve to prevent unintended flow
- > Three interchangeable injector nozzles to cover a wide variety of HP levels
- > LED dash light for system status and low fluid warning

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AEM Water/Methanol Injection Systems are used to spray the intercoolers of Olsbergs MSE's Global Rallycross Supercars for enhanced charge air cooling.





Water/Methanol Failsafe Gauge

Monitors Entire WMI Injection Flow Curve for Complete Peace of Mind

The Water/Methanol Failsafe Device eliminates the potential for engine damage if your water/methanol injection system stops injecting due to an absence of fluid. It actively monitors the entire flow curve independent of pressure, continuously collecting flow vs. injection rate data so that any deviation from a flow curve that you define in the software triggers an alarm output. You can set the output to reduce boost or timing, change maps, add fuel, trigger a two-step or perform practically any action you choose to save your engine. It will work on virtually ANY water/methanol injection system that uses 1/4" OD or 4mm OD tubing.

- > Actively monitors the entire water/methanol injection curve
- > Triggers an alarm output if flow deviates from user defined flow curve
- > "Auto Set" feature automatically creates baseline configuration
- > Built-in warning lights
- > Internal data logger records all injection flow and alarm status data
- > Black/white faceplates and black/silver bezels
- > Programmable for either 0-500cc/min or 0-1000cc/min flow ranges
- > User programmable backlighting
- > PC-based software with USB connectivity
- > Fully adjustable alarm delay and reset period
- > 0-5 V Analog output
- > Auxiliary input for use with AEM Water/Methanol "Boost Safe" feature
- > Precision flow sensor included

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Water/Methanol Injection Filter

Filters particulates as small as 40 microns to protect the working parts of your water/methanol system and engine. Installs in-line before the water/methanol pump. Can be used on virtually any water/methanol system using 1/4" OD tubing.



Water/Methanol Injection Systems	
Part Number	Description
30-3300	Boost Dependent 1 Gal. 35PSI Max (Gasoline)
30-3301	Boost Dependent 5 Gal. 40 PSI Max (Turbo Diesel)
30-3302	Boost Dependent Tank-Less 35 PSI Max
30-3303	Boost Dependent Tank-Less 40 PSI Max
30-3350	Multi Input 1 Gal. N/A or High Boost, MAF/MAP/IDC
30-3351	Multi Input 5 Gal. N/A or High Boost, MAF/MAP/IDC
30-3352	Multi Input Tank-Less N/A or High Boost MAF/MAP/IDC
Water/Methanol Accessories & Parts	
Part Number	Description
30-3003	Water/Methanol Inline Filter
30-3312	Water/Methanol Injector & Nozzle Kit
30-3015	200 PSI Recirculating Pump
30-2155	Water/Methanol Check Valve Kit
35-4500-20	Injection Tubing 20'
30-3321	1 Gal. Tank w/ Conductive Low Fluid Level Sensor
30-3320	5 Gal. Tank w/ Conductive Low Fluid Level Sensor
30-3322	Conductive Low Fluid Level Sensor & Harness
Water/Methanol Failsafe Device/Flow Gauges	
Part Number	Description
30-3020	Water/Methanol Failsafe Device 1/4"
30-3020M	Water/Methanol Failsafe Device 4mm
30-5141	Analog Water Flow Gauge 0-500cc
30-5142	Analog Water Flow Gauge 0-1000cc



X-Series Digital Gauges Incredible Looks Combined with Advanced Technology

AEM X-Series Digital Gauges combine incredible looks and dramatically increased readability with technological feature advancements for today's modern racer. A bright, four-digit LED display is 87% larger than our existing digital gauges for better readability, and a sweeping LED "needle" lines the edge of the

gauge face for quick reference. Its overall display area is 33% larger than our other digital gauges, but is packaged in a standard 52mm diameter for easy integration into gauge pods. With an overall depth of under an inch and a cup depth of just under 1/4-inch, they can be mounted practically anywhere.

AEMnet Daisy Chain Capability

An optional AEMnet cable for temp and pressure gauges lets users daisy chain multiple gauges together.

- > 52mm gauge diameter and slim 0.825" overall gauge depth
- > Gauge cup depth under 1/4" deep - mount them virtually anywhere!
- > Programmable 4-digit or 3-digit center LED
- > 24 outer LEDs
- > Peak/Recall via gauge face buttons
- > User selectable threshold warnings (excl. Volts, AEMnet & OBDII)
- > Optional silver bezel with white faceplate(s) available
- > AEMnet CANbus-enabled for transmitting data to EMS or data logger
- > 0-5v analog outputs for EMS or data logger
- > Auto dimming
- > Positive locking connectors



Optional white faceplates and silver bezel (sold separately).

X-Series OBDII Gauge

Displays a Vehicle's OBDII Channels and Reads/Clears Trouble Codes

The X-Series OBDII Digital Gauge connects to a vehicle's OBDII port and can display OBD channels on the center LED. Select which channel you want to be displayed and toggle between them using the buttons on the gauge face. When restarting a vehicle, the last channel is remembered and displayed. The number of different parameters available for viewing/display is dependent on the vehicle's readable channels. Possible channels for display include:



- > MIL status and number of DTCs
- > Engine load
- > Coolant temp
- > Fuel pressure
- > Engine RPM (tachometer)
- > Vehicle Speed
- > Throttle Position
- > Air/Fuel Ratio
- > Throttle Position
- > Intake air temp
- > Ethanol fuel %
- > Boost pressure
- > MAP
- > EGT
- > And MORE!

Read & Clear Diagnostic Trouble Codes (DTCs)

In DTC mode, the X-Series OBDII Gauge can display the PID that is causing a trouble code and allow users to clear the trouble code using the buttons on the gauge face if the cause of the DTC is remedied.



X-Series AEMnet CANbus Gauge

Displays Multiple Parameters from AEMnet Enabled Devices

The X-Series Digital AEMnet Gauge is like having multiple data displays all on one gauge! It receives the AEMnet CANbus datastream from AEMnet-enabled devices including the Infinity ECU, Series 2 EMS, 4-Channel Wideband UEGO AFR Controller and X-Series Widebands, and can display these parameters on the LED display. Users can scroll through the available channels and select what data is displayed, set alarms and view peak/recall for each channel by using the buttons on the faceplate. Available channels below assumes that the relevant sensors are installed.

Series 2, EMS-4 or Infinity ECU available channels:

- | | | |
|----------------|-------------------|-------------------|
| > Engine RPM | > Intake Air Temp | > Gear |
| > Throttle | > Lambda 1 | > Ignition Timing |
| > Engine Load | > Lambda 2 | > Vehicle Speed |
| > Coolant Temp | > Battery Volts | |

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Additional Infinity ECU available channels:

- | | | |
|----------------------|-----------------|-------------------|
| > Manifold Pressure | > Oil Temp | > Knock |
| > Oil Pressure | > Trans Temp | > Wheel Slip |
| > Fuel Pressure | > Airbox Temp | > AFR F/B % |
| > Coolant Pressure | > Flex Content | > Injector Duty % |
| > Crankcase Pressure | > Boost Control | |
| > Baro Press | > Boost Target | |

4-Channel Wideband UEGO available channels:

- > Individual AFRs for Cyl 1 through Cyl 8

X-Series Wideband(s) available channels:

- > Lambda 1 through Lambda 8

Vehicle Dynamics Module (VDM) available channels

- | | |
|------------------------|-----------------------------|
| > Vehicle Speed (GPS) | > Longitudinal Acceleration |
| > Lateral Acceleration | > Altitude |

X-Series Speedometer

Receives GPS Info to Display Vehicle Speed & Can Send Data to Infinity ECU!

AEM's X-Series Digital Speedometer receives data from the AEM VDM or an RS232 NMEA GPS device and uses it to display MPH on the center LED and sweeping digital "needles". It is AEMnet enabled and has the ability to retransmit this data through the CANbus stream. This allows users with an Infinity ECU or AQ-1 data logger to record GPS data and use it to create track maps, replay race laps, and combine it with other logged data using AEMdata analysis software!



AEM Digital Gauges

View and Log Vital Vehicle Information to the Exact Degree!

AEM Digital Gauges combine unsurpassed accuracy, speed and control with an easy-to-read digital LED interface. They feature a bright, three-digit LED display and a sweeping LED “needle” that lines the edge of the gauge face. Each gauge includes a 0-5 V analog output for use with data loggers and virtually any engine management system, interchangeable silver and black bezels and black and white faceplates to personalize the look of your gauge.



- > Ideal for carbureted or EFI vehicles
- > Easy-to-install Plug & Play harness and sensor included
- > 24 green LED display lights provide immediate reference to monitored engine function
- > Each gauge comes with interchangeable black/silver bezels and black/white faceplates
- > 0-5 V analog output included for use with data loggers and virtually any engine management system
- > Three-digit digital readout to exact degree
- > Auto-dimming gauge face and read out lighting
- > No laptop required for monitoring
- > Standard 52mm (2-1/16”) gauge housing



AEM Analog Style Gauges

Unbeatable Viewing Resolution, Accuracy and Looks!

AEM's Analog Style Gauges feature quick response and smooth needle movement that is easy to read in all lighting conditions. Each gauge offers a swept area of 320 degrees for the best viewing resolution at almost any angle.

All AEM Analog Style Gauges feature seven backlight colors that allow you to match your OEM or other gauge backlighting, a silver and black bezel and a white and black faceplate to best match the interior of your vehicle. The backlighting is adjustable via a dial on the rear of the gauge to optimize viewing in all lighting conditions.



- > Ideal for carbureted or EFI vehicles
- > Easy-to-install harness and sensor included
- > 320-degrees of viewing resolution
- > Each gauge comes with interchangeable black/silver bezels and black/white faceplates
- > Adjustable backlighting
- > 0-5 V analog output included for use with data loggers and virtually any engine management system
- > Standard 52mm (2-1/16") gauge housing



Universal 52MM Silicone Gauge Boot

Our silicone gauge boot (PN 30-8444) repels water (not waterproof), and protects your gauge from dust and contaminants.



Tru-Boost Gauge-Type Boost Controller
Combines Electronic Boost Controller Precision
with Manual Controller Ease-of-Use!

AEM's TRU-BOOST Gauge-Type Controller is an electronic boost controller that combines the simplicity of a manual boost controller with the added ease of adjusting boost levels through a gauge interface. There is no external interface required for set up, and it is fully functional right out of the box.

The gauge includes an on-board 29 PSi_g pressure sensor, built-in overboost protection with two timed shutdown levels, a scramble boost setting and a low-side output for a warning light. A 75 PSi_a boost sensor for high boost applications is sold separately (see below). AEM's boost control solenoid is included.

- > No PC required for programming!
- > Two user selectable boost settings with peak boost memory
- > Scramble boost setting allows user to momentarily change boost levels
- > 24 Scalable LEDs
- > Interchangeable black and white bezels, black and silver pin guide and black and white faceplates to customize look of display
- > One (1) low-side output included for warning lights



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Tru-Boost 5Bar External Pressure Sensor Kit

Read boost levels of up to 50PSi_g. Sensor kit includes: Stainless-Steel 5BAR/75PSi_a Pressure Sensor, 1/8" NPT Female to -4 Male Adapter, 1/8" NPT Female to 3/16" Barb Adapter and Cable.

Boost Control Solenoid Kit

AEM's boost control solenoid is the only one specifically manufactured for automotive boost applications. Kit includes: Boost Control Solenoid with 1/8-NPT Fittings, -4 Adaptors, Barb Adaptors and Connector Plug with Flying Lead.



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Mockstangboyz Racing's LS-powered Fox body Mustang uses Tru-Boost Controller, Wideband Failsafe, Digital Fuel Pressure and Digital Volts gauges. Winner of 9.00 average class at LS Fest 2015.

X-Series Digital Gauges

Part Number	Description
30-0300	X-Series Wideband UEGO AFR Gauge
30-0301	X-Series Oil/Fuel Pressure Gauge 0 to 100psi / 0 to 7bar
30-0302	X-Series Oil/Transmission/Water Temperature Gauge 100 to 300F / 40 to 150C
30-0303	X-Series Volt Gauge 8 to 18V
30-0305	X-Series EGT Gauge 0 to 1800F / 0 to 1000C
30-0306	X-Series Boost Gauge -30inHg to 35psi / -1 to 2.5bar
30-0307	X-Series Digital Oil Pressure Gauge 0 to 150psi / 0 to 10bar
30-0308	X-Series Digital Boost Gauge -30inHg to 60psi / -1 to 4bar
30-0309	X-Series Digital Boost/Fuel Pressure Gauge 0 to 15psi SAE Only
30-0311	X-Series Digital OBD2 Gauge
30-0312	X-Series Digital AEMnet CAN Gauge
30-0313	X-Series Digital GPS Speedometer Gauge 0 to 160mph / 0 to 260kph

Digital Performance Gauge Applications

Part Number	Description
30-4110	Digital Wideband UEGO Gauge
30-4900	Wideband Failsafe Gauge
30-4910	Flex Fuel Wideband Failsafe Gauge
30-4406	Digital Boost Gauge. -30-35psi
30-4408	Digital Boost Gauge. -30-50psi
30-4910	Flex Fuel Wideband Failsafe Gauge
30-4350	Tru-Boost Controller Gauge
30-4401	Digital Oil/Fuel/Air Pressure Gauge. 0-100psi
30-4407	Digital Oil Pressure Gauge. 0-150psi
30-4402	Digital Oil/Transmission/Water Temperature Gauge. 100-300F
30-4400	Digital Volt Gauge. 8-18Vs
30-4300	Serial Datastream Gauge (see page 13)

Analog Style Performance Gauge Applications

Part Number	Description
30-5130	Analog Wideband UEGO Gauge. 8.5-18 Gasoline AFR
30-5143	Analog E85 Wideband UEGO Gauge. 5.7-11.9 E85 AFR
30-5131	Analog EGT SAE Gauge. 0-1800F
30-5144	Analog Boost/Fuel Pressure SAE Gauge. 0-15psi
30-5132	Analog Boost SAE Gauge. -30-35psi
30-5137	Analog Boost SAE Gauge. 0-60psi
30-5133	Analog Oil/Fuel SAE Pressure Gauge. 0-100psi
30-5135	Analog Oil SAE Pressure Gauge. 0-150psi
30-5140	Analog Oil/Transmission/Water Temperature SAE Gauge. 100-300F
30-5139	Analog Volts Gauge. 8-18V
30-5131M	Analog EGT Metric Gauge. 0-980C
30-5132M	Analog Boost Metric Gauge. -1-2.4Bar
30-5137M	Analog Boost Metric Gauge. 0-4.1Bar
30-5133M	Analog Oil/Fuel Metric Pressure Gauge. 0-6.9Bar
30-5135M	Analog Oil Metric Pressure Gauge. 0-10.2Bar
30-5140M	Analog Oil/Transmission/Water Temperature Metric Gauge. 40-148C
30-5141	Analog H2O Flow Gauge. 0-500cc
30-5142	Analog H2O Flow Gauge. 0-1000cc
30-3020	Water/Methanol Failsafe Device - SAE 1/4"
30-3020M	Water/Methanol Failsafe Device - Metric 4mm

Boost Control Applications

Part Number	Description
30-4350	Tru-Boost Controller Gauge
30-4351	Tru-Boost Gauge. 75 PSIA or 5 Bar Map Sensor Upgrade
30-2400	Boost Control Solenoid Kit. Includes: Boost Control Solenoid, 2 X 1/8" NPT to 3/16" Barb Adapter & Muffler

Gauge Accessories

Part Number	Description
30-8444	Gauge Boot - 52mm. Universal Weather Resistant Gauge Boot
30-4351	Tru-Boost Gauge. 75 PSIA or 5 Bar Map Sensor Upgrade
30-3420	Digital to Analog; Gauge Wiring Conversion; Pressure/Temp/Voltage; 30-4400 to 30-5139, 30-4401 to 30-5133(M), 30-4402 to 30-5140(M), 30-4406 to 30-5132(M), 30-4407 to 30-5135(M)
30-3421	Digital to Analog Gauge Wiring Conversion; UEGO/Wideband; 30-4400 to 30-5130 & 30-5143





High Flow E85 & Gasoline Fuel Pumps

High flow capability and low cost combine for the ultimate fuel pump upgrade

AEM's High Flow in-tank and inline Fuel Pumps are designed for high performance naturally aspirated and forced induction EFI vehicles.

IN-TANK HIGH FLOW FUEL PUMPS

In-tank pumps flow up to 320 lph (84 gph) at 43 PSI and are capable of supporting over 1,000 HP at 43 PSI.* Flow curves from 35 to 90 PSI and current draw vs. fuel pressure charts are on the following pages next to the fuel pump diagrams.

AEM black anodized in-tank fuel pumps are for use with gasoline only and green top 'E85' fuel pumps are compatible with E100 ethanol, M100 methanol and all gasoline types. AEM's E85-compatible High Flow In-Tank Fuel Pumps feature robust internal construction that is designed to withstand the low lubricity characteristics of ethanol and methanol fuels.

- > Direct fit applications for popular vehicles are available
- > Compact 39mm diameter fits most applications
- > Multiple inlet designs to ease installation
- > Wiring harness and pre filter are included
- > Every pump is tested to verify its stated flow capability

INLINE HIGH FLOW FUEL PUMP

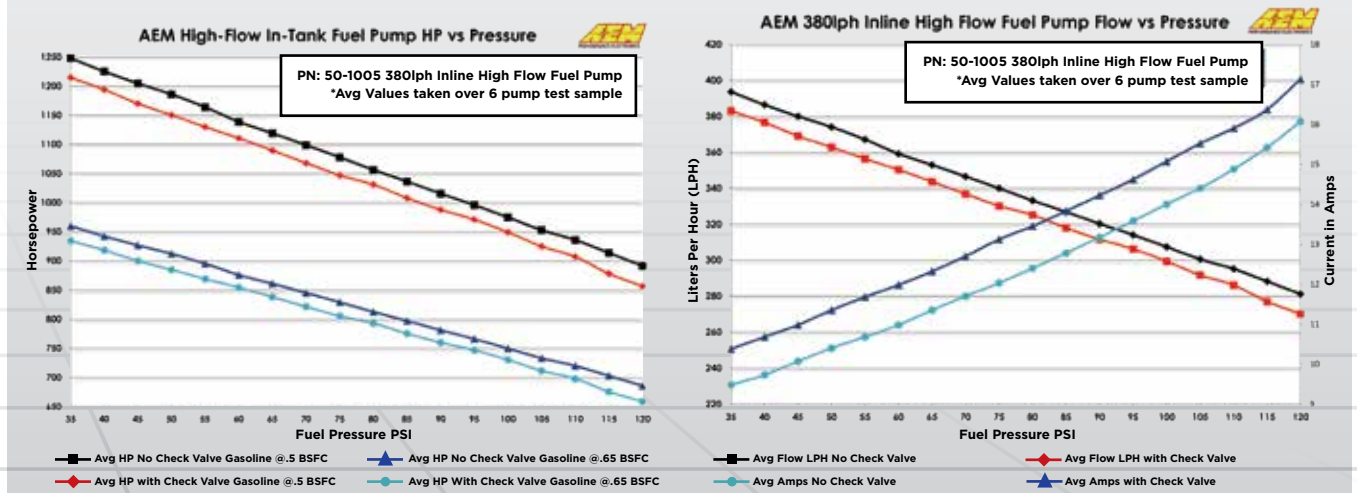
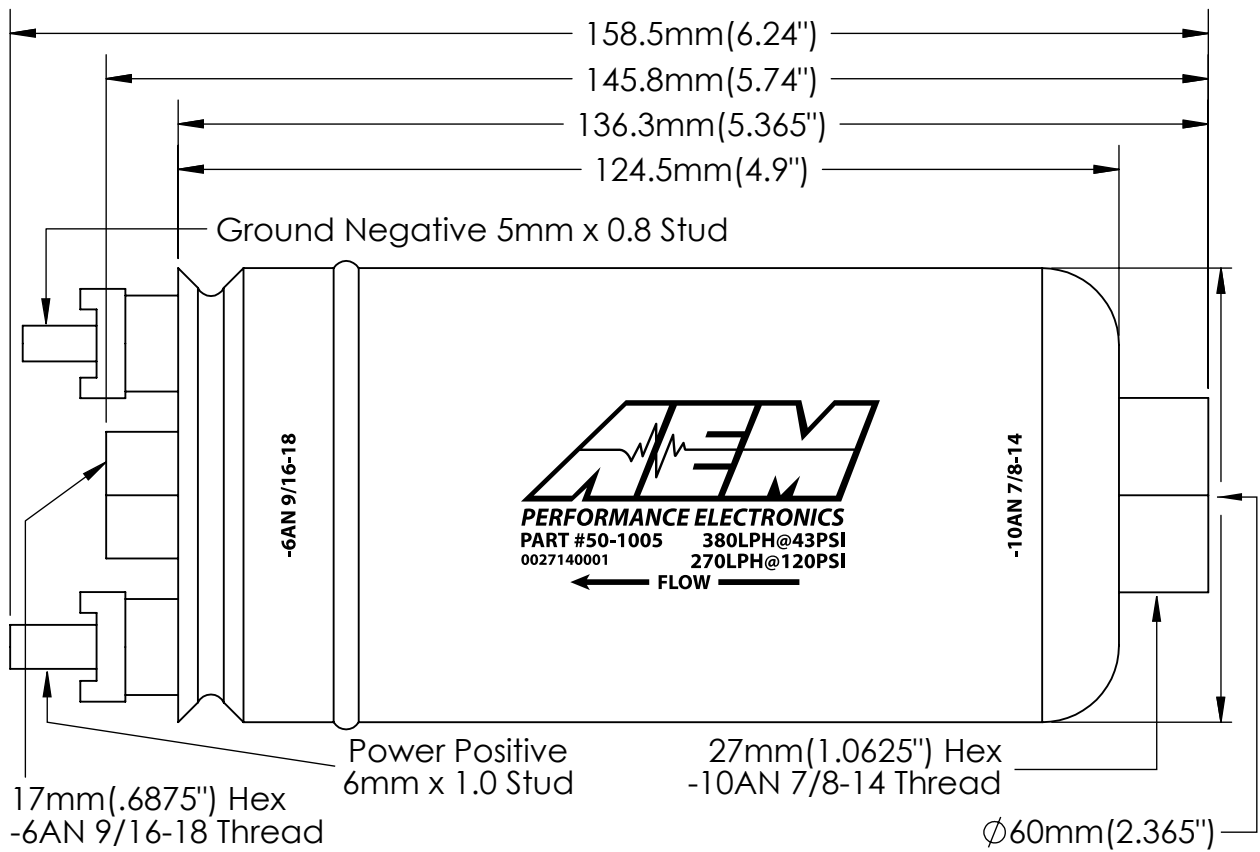
AEM's 380lph High Flow, High Pressure Fuel Pump is capable of supporting over 1,200 HP normally aspirated and a whopping 860 HP at 30 psi boost!** It flows 380 lph (100 gph) at 43 PSI, 340 lph (90 gph) at 73 PSI, and 270 lph (71 gph) at 120 PSI.

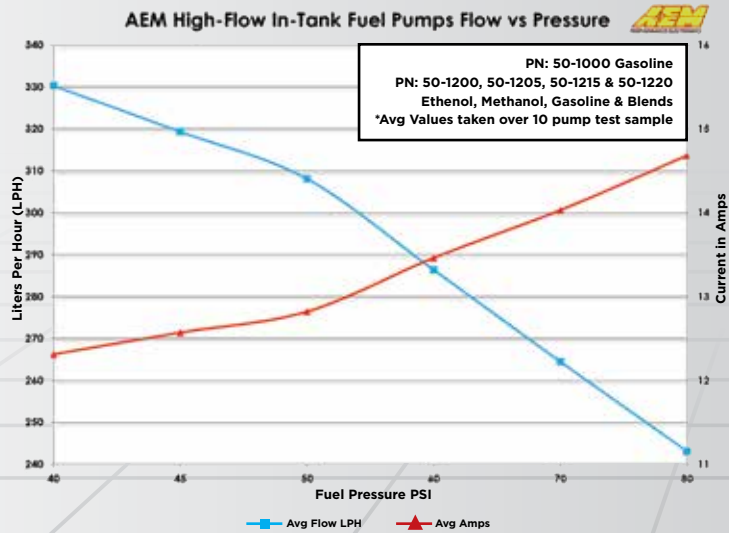
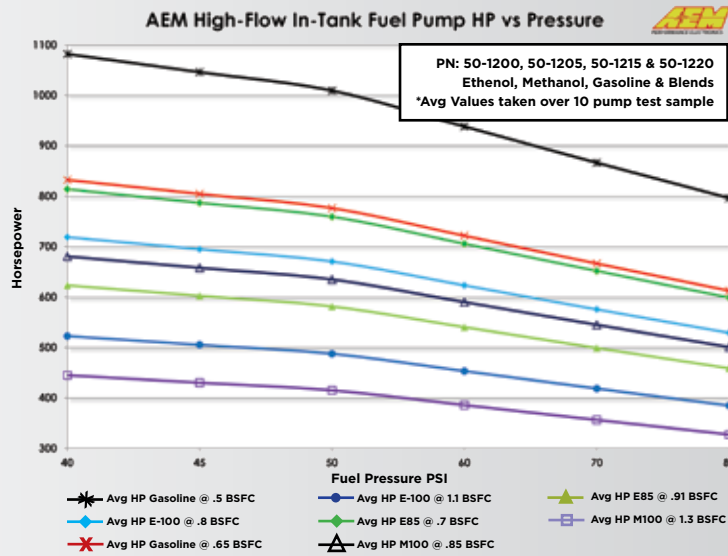
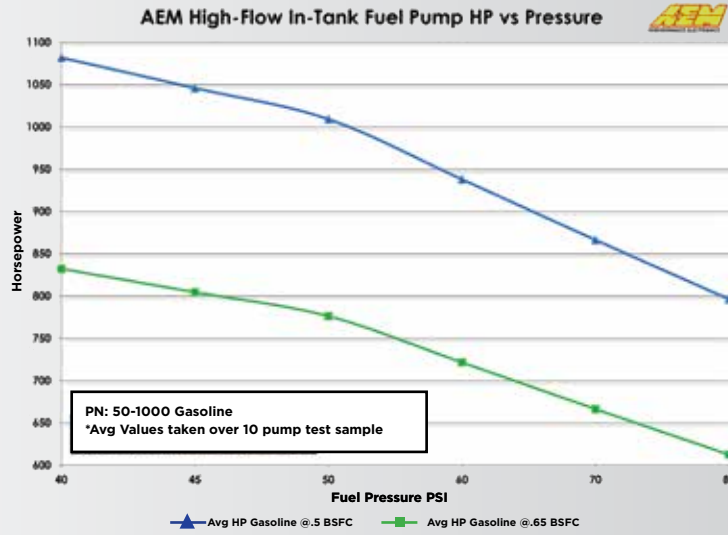
- > Install externally or in-tank
- > Optional hardware available
- > Uses industry standard "044" style envelope
- > -10 AN female inlet and -8 AN female outlet for easy installation
- > For use with all types of gasoline (alcohol fuels will diminish pump life)

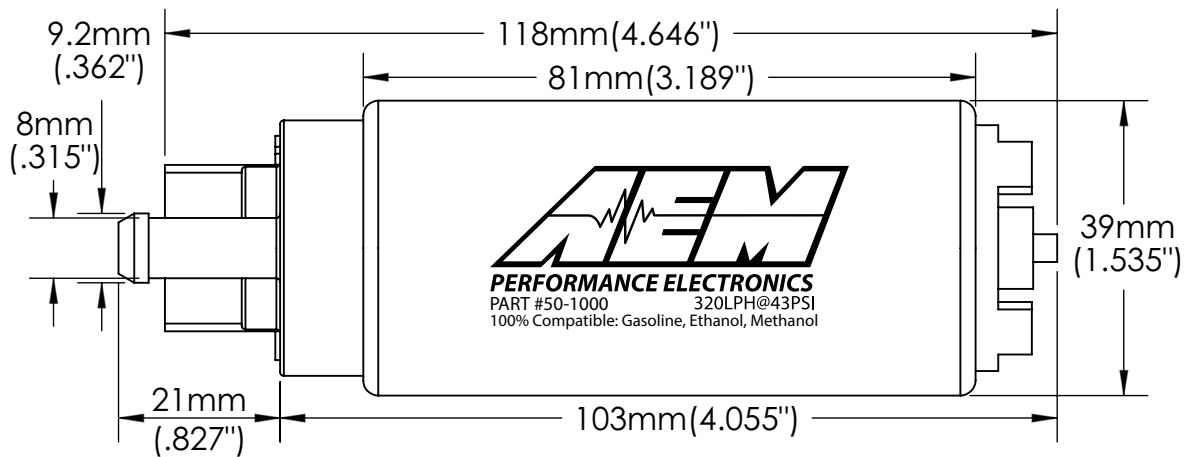
*Power rating given at 43 PSI, 13.5v at the pump with a BSFC of .5. Flow capability for horsepower support is ultimately dependent on fuel hose diameter, and system electrical voltage and amperage capabilities.

**Power rating given using gasoline and assuming a base fuel pressure of 43 PSI, 13.5v at the pump, 6.2 lbs/gal with a BSFC of 0.65. Boost fuel pressure is assumed to be the base pressure of 43 PSI + boost pressure. Flow capability for horsepower support is ultimately dependent on fuel hose diameter, and system electrical voltage and amperage capabilities.

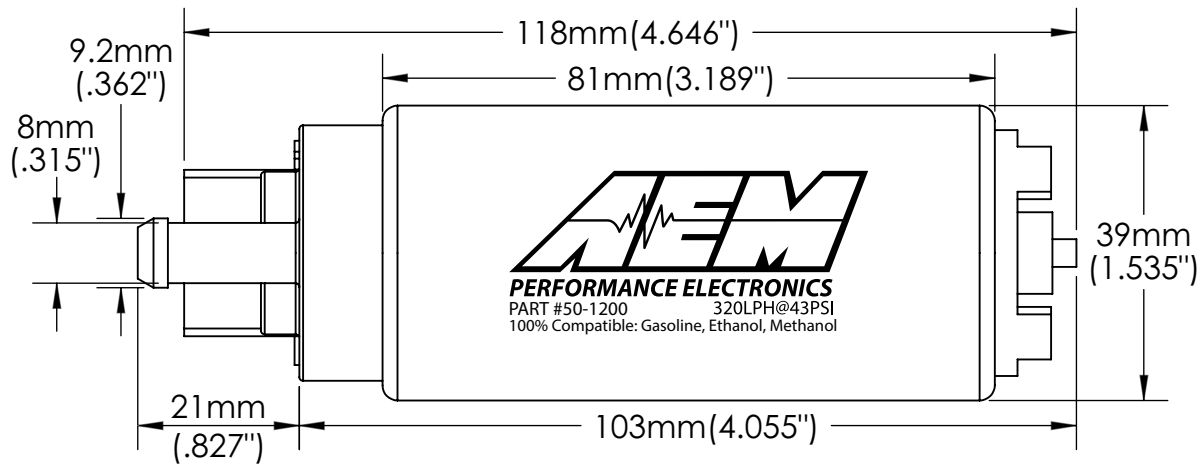
380LPH INLINE HIGH FLOW FUEL PUMP SPECS





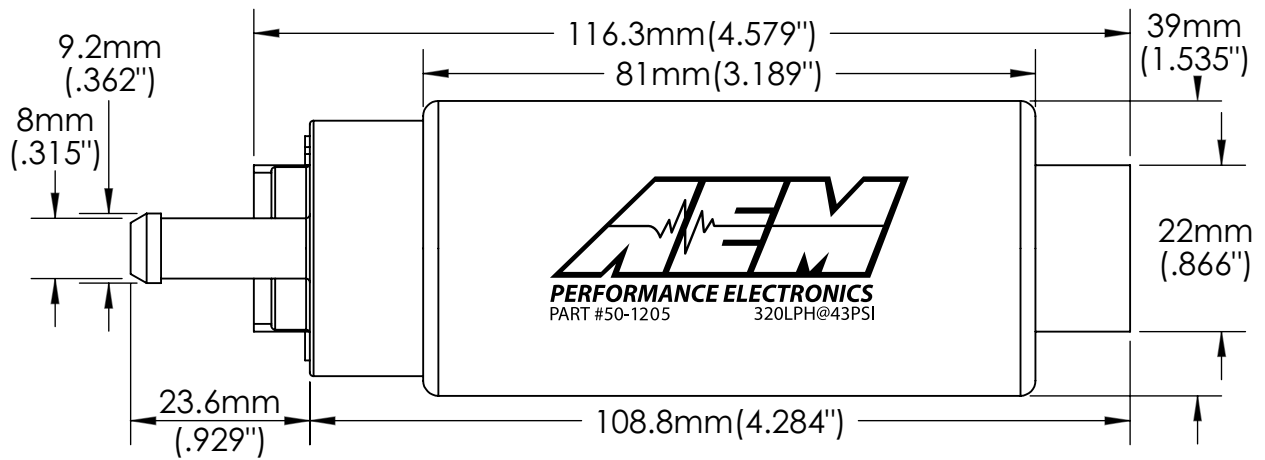


Offset inlet, inline.

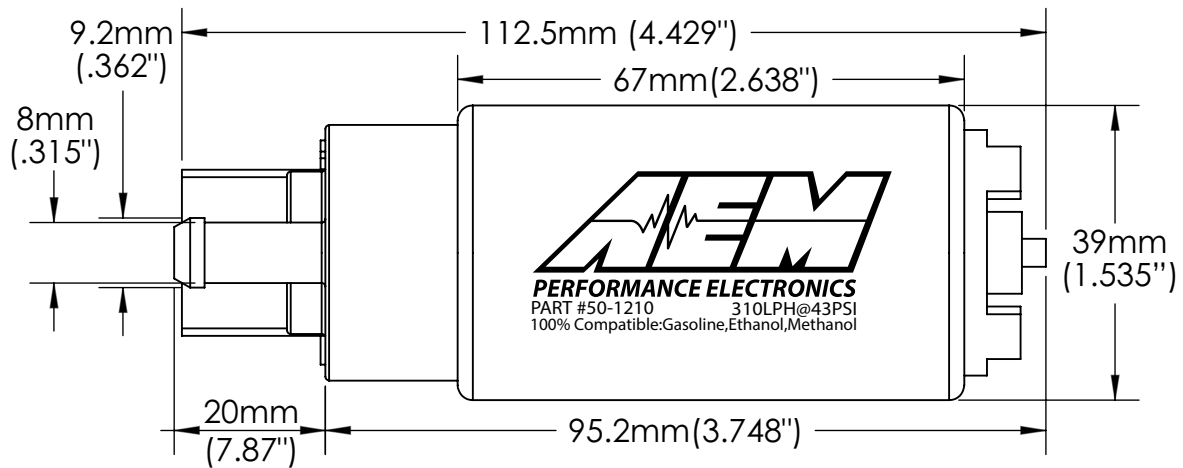


Offset inlet, inline.

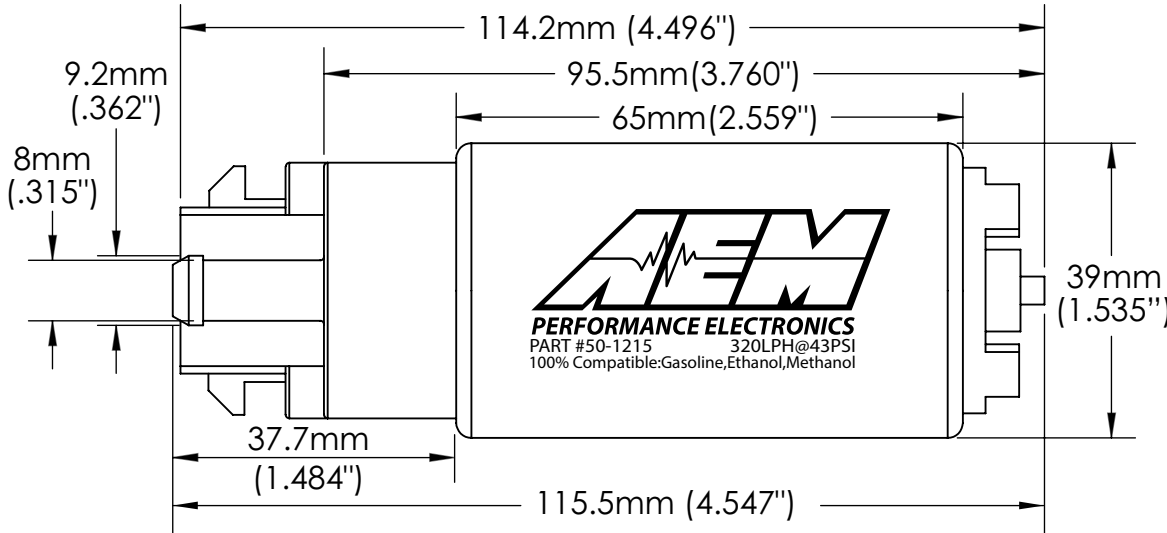
320LPH IN-TANK HIGH FLOW FUEL PUMP SPECS



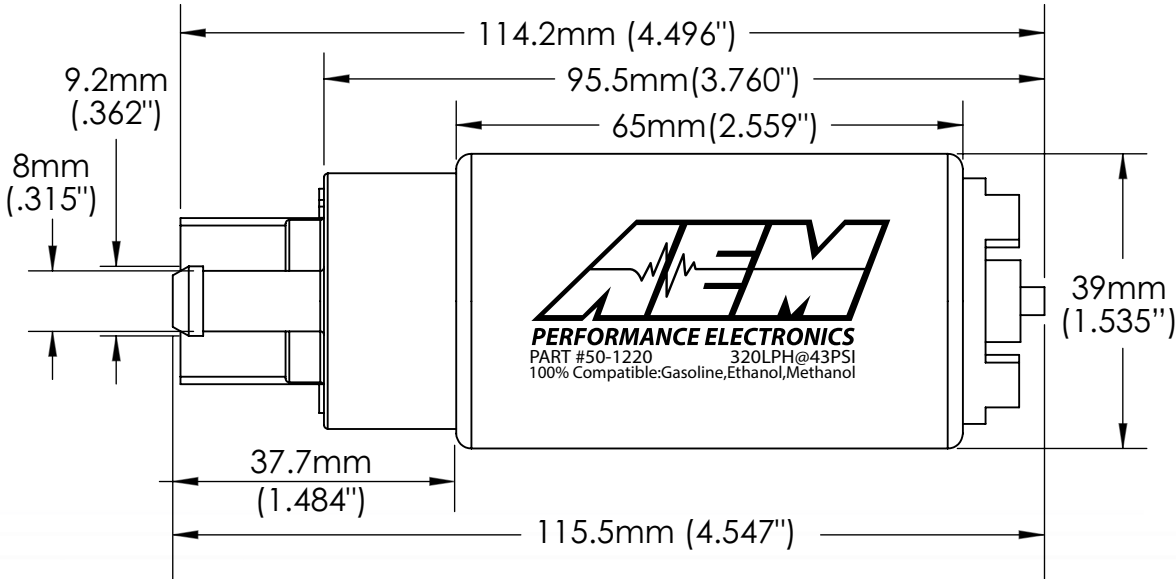
Center inlet



Offset inlet, inline



Offset inlet, inline with hooks



Offset inlet, inline



Universal High Flow -10 AN Inline Fuel Filter

AEM's -10 AN Inline Filter maximizes flow without sacrificing filtration. The end caps are machined with -10AN female fittings that allow for up to 12.32 gpm @ 45 PSI and 2.63 gpm @ 6 PSI of flow. Machined O-ring receiver grooves prevent leaks and all sealing O-rings and gaskets are made of Viton for outstanding performance when using gasoline, alcohol or gasoline/alcohol blended fuels.



- > Easy mounting virtually anywhere in the vehicle (2" OD x 10" L)
- > Filters out contaminants as small as 7 microns in size
- > Can filter most fuel types including Methanol, blended fuels and all types of gasoline
- > Hard black anodized

500 HP High Volume Fuel Filter

AEM's High Volume Fuel Filter is a direct-fit replacement for most Honda/Acura applications, or used as a floating application on most vehicles. The filter body is made from 6061 aluminum with double O-ring seals.

- > Thread sizes are 12x1.25 top and 14x1.50 bottom
- > Hard black anodized
- > Uses standard high flow replacement filter (NAPA Gold Part #PN4950 or FRAM part #CH6069)



1000 HP Adjustable Fuel Pressure Regulators

These regulators can support enough fuel flow for engines up to 1000 horsepower. Our patented interchangeable discharge ports enable the regulator's output to match the output of virtually any fuel pump. This unit is tapped to accept a -6 AN, or 9/16"x18 fittings and includes a 1/8 NPT port for a fuel pressure gauge or pressure sensor pick up.

- > CNC-machined from 6061-T6 billet aluminum
- > Adjustable from 20 psi to maximum fuel pump capacity
- > Interchangeable discharge ports
- > Methanol, blended fuel and gasoline compatible
- > 1:1 rising rate for boost
- > Hard black anodized

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Fuel Rails For 4-Cylinder Vehicles

AEM High Volume fuel rails feature a 1/2-inch fuel bore to support fuel flow for applications up to 1,000 horsepower and dampen backpressure pulses created by larger injectors. An additional 1/8th NPT port is included to accommodate a nitrous set up or fuel pressure gauge. An included fitting accommodates the factory fuel line and the ends are pre tapped to accept -6 AN, or 9/16"x18 fittings.



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FUEL DELIVERY APPLICATIONS

Although AEM's High Flow Fuel Pumps are the same physical size as many OEM fuel pumps, they may not be appropriate for a specific application. It is imperative that you check the fuel pump sizing for your vehicle before purchasing an AEM High Flow Fuel Pump.

Most AEM fuel pumps include a universal pre filter and/or hardware which may not fit certain vehicle applications. Please refer to the OEM recommendations for filter replacement for your vehicle.

Your vehicle's factory fuel pump wiring may not be adequate enough to handle the current draw of AEM's High Flow Fuel Pumps. Please refer to the Electrical Requirements section in the instructions document for proper wiring. You can download a copy of the instructions from the BUY/INSTRUCTIONS tab on the product pages of our website.

AEM does not condone or approve of the modification of a tank to accommodate a High Flow Fuel Pump and cannot guarantee the pump's performance or operation if any modifications are made.

Relay Kits

Part Number	Description
30-2061	30 Amp Relay Kit with 80" 10-Gauge Harness, Terminals and Connectors
30-2062	20 Amp Relay Kit with 80" 10-Gauge Harness, Terminals and Connectors

High Flow In Tank Direct Fit Fuel Pumps

Description	Part Number
ACURA	
1992-2001 Integra All	50-1220
2002-2006 RSX, All	50-1220
FORD	
1985-1997 Mustang	50-1205
HONDA	
1994-2007 Accord 4 Cyl. All	50-1220
2000-2005 Civic All	50-1220
2006-2011 Civic All	50-1215
2007-2011 CR-V	50-1215
2003-2011 Element	50-1215
2000-2009 S2000	50-1220
MITSUBISHI	
2008-2015 Evolution Lancer	50-1220
NISSAN	
2008-2014 GT-R REQ. 2 PUMPS	50-1215
SCION	
2013-2015 FR-S All	50-1220
2005-2010 tC All	50-1220
2004-2006 xA All	50-1220
2004-2006 xB All	50-1220
SUBARU	
2013-2015 BRZ	50-1220
2002-2007 Impreza	50-1220
2008 - 2014 Impreza	50-1215
2002-2007 WRX	50-1220
2008 - 2014 WRX	50-1215
2002-2007STi	50-1220
2008 - 2014 STi	50-1215
2002-2007 Forrester Turbo	50-1220
2008 - 2014 Forrester Turbo	50-1215
TOYOTA	
1992-2002 4Runner	50-1220
1995-1999 Avalon	50-1220
1992-2006 Camry	50-1220
1994-2005 Celica	50-1220
1993-2004 Corolla	50-1220
2000-2005 Echo	50-1220
2001-2003 Highlander	50-1220
2003-2006 Matrix	50-1220
2000-2005 MR2 Spyder	50-1220
1992-1998 Paseo	50-1220
1992-1995 SR5 Pickup	50-1220
1994-1995 Previa	50-1220
1996-2005 RAV4	50-1220
1998-2000 Sienna	50-1220
1999-2006 Solara	50-1220
1993-1998 T100 Pickup	50-1220
1995-2004 Tacoma	50-1220
1990-1998 Tercel	50-1220

High Flow Inline 380LPH Fuel Filter

Part Number	Description
50-1005	380lph Inline High Flow Fuel Pump
50-200-06	-6AN Discharge Fitting for Inline High Flow Fuel Pump
50-200-08	-6AN to -8AN Discharge Fitting with Check Valve for Inline High Flow Fuel Pump
50-200-10	-10 Inlet Port Fitting for Inline High Flow Fuel Pump
25-302BK	Universal , Inlet: 2 X -6 (9/16-18) Outlet: -6 (9/16"-18) Gauge Port: 1/8"NPT
50-200-11	-10 Inlet Port Filter for Inline High Flow Fuel Pump
50-200-86	-6AN to -8AN Discharge Fitting for Inline High Flow Fuel Pump

High Flow in Tank Fuel Pump Applications

Part Number	Description
50-1000	Gasoline 320 lph (@43PSI)
50-1200	E85 320 lph (@43 PSI)
50-1205	320lph E85-Compatible High Flow In-Tank Fuel Pump (Center Inlet)
50-1210	310lph E85-Compatible High Flow In-Tank Fuel Pump (Short Offset Inlet, Inline)
50-1215	320lph E85-Compatible High Flow In-Tank Fuel Pump (65mm Short Offset Inlet with hooks, Inline)
50-1220	320lph E85-Compatible High Flow In-Tank Fuel Pump (65mm Short Offset Inlet, Inline)

High Volume Fuel Filter Applications

Part Number	Description
25-200BK	High Volume Fuel Filter. Black. Acura & Honda. Inlet: 14mm X 1.5 Outlet: 12mm X 1.25
25-201BK	Universal High Volume Fuel Filter. Inlet: -10AN Outlet: -10AN
35-4006	Replacement Fuel Filter Element for 25-200BK
35-4004	Replacement Fuel Filter Element for 25-201BK



AEM Adjustable Fuel Pressure Regulators and Fuel Rails products may be used solely on vehicles used in sanctioned competition which may never be used upon a public road or highway, unless permitted by specific regulatory exemption. It is the responsibility of the installer and/or user of this product to ensure that it is used in compliance with all applicable laws and regulations, and this product must not be purchased if the intent is to use it in an unlawful manner.

High Volume Fuel Pressure Regulator Applications

Part Number	Description
25-300BK	Acura & Honda Inline Flange with Straight Return Line Fitting
25-301BK	Acura & Honda Offset Flange with Straight Return Line Fitting
25-303BK	Acura & Honda Inline Flange with 90 Degree Return Line Fitting
25-304BK	Acura & Honda Offset Flange with 90 Degree Return Line Fitting
25-302BK	Universal , Inlet: 2 X -6 (9/16-18) Outlet: -6 (9/16"-18) Gauge Port: 1/8"NPT
25-390	Adjustable Fuel Pressure Regulator 90 degree Fitting Kit
25-392	Adjustable Fuel Pressure Regulator Rebuild Kit

High Volume Fuel Rail Applications

Description	Part Number
Acura	
1994-2001 Integra 1.8L I4 [B18B1, B18C1 & B18C5]	25-100BK
2002-2006 RSX 2.0L I4 [K20A2, K20A3 & K20Z1]	25-111BK
Eagle	
1990-1998 Talon TSi 2.0L I4 Turbo [4G63]	25-130BK
Honda	
1990-1996 Accord/Prelude 2.2L I4 [F22A1, F22A4, F22A6]	25-104BK
1990-1996 Accord/Prelude 2.2L & 2.3L I4 [H22A1, H22A4 & H23A1]	25-104BK
1988-1995 Civic/CRX/Del Sol 1.5L & 1.6L I4 [D15B7, D15B8, D16A6 & D16Z6]	25-108BK
1994-2000 Civic/Del Sol 1.6L I4 [B16A2 & B16A3]	25-103BK
1996-2000 Civic/Del Sol 1.6L I4 [D16Y7 & D16Y8]	25-109BK
2002-2005 Civic Si 2.0L I4 [K20A3]	25-111BK
2000-2005 S2000 2.0L & 2.2L I4 [F20C1 & F22C1]	25-112BK
Mitsubishi	
1990-1998 Eclipse/Galant 2.0L I4 Turbo [4G63]	25-130BK
2003-2006 Lancer Evolution VIII & IX 2.0L I4 Turbo [4G63]	25-131BK
-6AN (9/16"-18) Adapter Kit for Part #25-130BK	25-391
Plymouth	
1990-1994 Laser RS 2.0L I4 Turbo [4G63]	25-130BK





Part numbers on page 67.

High-Output “Smart” and “Dumb” Inductive Ignition Coils

CDI-Level Spark Energy Without a CDI!

The tradeoff between adequate spark energy and adequate spark duration ends with AEM's High-Output Inductive Coils, the first inductive coils that deliver CDI-like spark energy and voltage, and the long spark duration necessary for vehicles running high compression, high RPM, forced induction and/or nitrous engines.

“Smart” and “Dumb” Coils Come Without or With an Igniter

AEM offers two versions of its High-Output Inductive Coils; An IGBT (Insulated Gate Bipolar Transistor) ‘smart’ coil for use without an external igniter, and ‘dumb’ coil for use with an external igniter.

- > CDI-like spark energy without the need for a CDI
- > More affordable than aftermarket LS1 coils
- > Compact size (3.8” x 3.62” x 1.87” Smart Coil, 3.53” x 3.62” x 2.65” Dumb Coil)
- > Robust construction allows them to be mounted almost anywhere
- > Massive Spark Energy, up to 118 mJ! (103 mJ Smart Coil, 118 mJ Dumb Coil)
- > Incredibly long spark duration, up to 3.2mS! (2.9 mS Smart Coil, 3.2mS Dumb Coil)
- > Up to 41kV Output Voltage, without a CDI! (40kV Smart Coil, 41kV Dumb Coil)
- > Weather and Shockproof design
- > Can be mounted directly to the engine

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BOOSTPOWER USA's Blown, Hot Rod BB with AEM High Output Smart Coils.

Engine Position Module

Replaces Your Distributor for Converting to Coil-Per-Plug Ignition!

AEM's Engine Position Module (EPM) allows users to convert their distributed ignition system to coil-on-plug (COP) or wasted spark. It replaces the factory distributor to allow for the use of COP or wasted spark when used with the necessary additional components (see CDI Pencil Coils next page and Ignition Coil Drivers below). It provides precise engine position via dual zero-speed optical sensors that deliver immediate signal generation regardless of engine speed (24 and 1 timing signal). A shock absorbing elastomer drive system eliminates potential timing deviation from vibration and protects the EPM module.



Part numbers on page 67.



The EPM adapts to any positive-drive, half-engine speed device (cam or distributor drive) and can be used with any engine management system that recognizes a 24 & 1 crank tooth pattern for crank and cam signals.

- > Bolt-on systems for popular Ford and Chevy V8s, and Honda race engines
- > 24-tooth crank, 1-tooth cam pattern per engine cycle—easy set up and accurate timing!
- > Easy EMS setup with timing pattern available in AEMtuner/InfinityTuner Wizards
- > Simple, weatherproof four-wire connection (12 V, ground, crank signal & cam signal)
- > EPM manufactured from 6061 T-6 billet aluminum with elastomer drive system to protect against vibration and potential timing deviation from vibration

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Ignition Coil Drivers

Affordable Coil-On-Plug Performance without a CDI!

AEM's Ignition Coil Driver can be used for converting to Coil-On-Plug (COP) without using a CDI. Our Coil Drivers drive two-wire ("dumb") coils in COP applications, and can also be used as a replacement for a stock coil driver.

- > Drive ignition coils on a coil-on-plug set-up without a CDI!
- > Ideal for ATVs, motorcycles, snowmobiles and racing vehicles with space limitations or those that do not require additional voltage generated by a CDI
- > The most affordable, reliable way to drive coils on a coil-on-plug set up
- > Simple installation
- > Complete hardware included

Part numbers on page 67.



Four Channel Coil Driver.
Combine two for V8 engines.



One Channel Coil Driver for distributed engines.



Three Channel Coil Driver for Powersports and V6 engines.

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CDI Pencil Coils

Combine with a Four-Channel Coil Driver or CDI for Coil-On-Plug Ignition

AEM's CDI Pencil coils are designed for converting your distributed ignition system to a coil-on-plug (COP) system using either a CDI module or AEM Ignition Coil Driver.

All CDI Pencil Coils are two-wire CDI compatible. Single CDI Pencil Coils, 4-pack kits and connector kits are available.

- > Increases spark energy - ideal for high boost, high RPM and high compression engines
- > Compatible with all standard automotive spark plugs (including threaded tip style)
- > CDI Pencil Coil Kits include pencil coil(s), connector pin(s), pin lock(s) and weather seals
- > Two-wire CDI/Igniter compatible coil for use with AEM Coil Driver or CDI

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B-Series Engine Coil-On-Plug Conversion

Affordable COP Performance That Eliminates Known Factory Ignition Issues

AEM's B-Series Coil-On-Plug (COP) Conversion Kit is the perfect ignition upgrade for naturally-aspirated or boosted B-Series engines that do not exceed 15 PSI of boost (CDI required above 15 PSI boost).

This COP Kit eliminates known performance issues common to the B-series engine's factory igniter. It is ideal for use with the Series 2 EMS (for individual ignition trim tuning) and is compatible with most aftermarket ECUs.

This kit includes an Engine Position Module, 4-Channel Coil Driver, CDI Pencil Coils and a Motorsports-grade plug & play wiring harness.

- > A complete COP conversion system with comprehensive instructions
- > Instructions include easy hook up reference for common Honda EMS units
- > Plug & Play wiring harness is labeled and stamped for easy installation



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Croiset Racing's HPD Honda Challenge CRX with Infinity-6, B-Series PNP Adapter Harness and B Series COP Conversion. 2014 National H2 Champion.

High Output Ignition Coil Applications

Part Number	Description
30-2852	IGBT "Dumb" Coil
30-2853	IGBT "Smart" Coil
CDI Pencil Coil Applications	
Part Number	Description
30-2854	Single CDI Pencil Coil
30-2854-4PK	Four-Pack, CDI Pencil Coils
Coil On Plug Conversion Applications	
Part Number	Description
30-2860	Honda B-Series Engines
Ignition Coil Drivers	
Part Number	Description
30-2840	Universal 4-Channel Ignition Coil Driver
30-2841	Universal 1-Channel Ignition Coil Driver
30-2843	Universal 3-Channel Ignition Coil Driver
Engine Position Module Applications	
Part Number	Description
30-3250	Universal EPM (requires custom machining of distributor shaft or mounting bracket for OHC)
30-3251	Chevy All Small & Big Blocks with Distributors
30-3255	Acura B & D Series. Honda B, D, H & F Series

2015 WORLD CHAMPION

Papadakis Racing's Rockstar Energy Drink/Hankook Tires drift Scion tC driven by Fredric Aasbo. Infinity ECU, 4-Channel Wideband Controller, AQ-1 Data Logger, Analog Style Gauges, Boost Control Solenoid, Engine Position Module and sensors. 2015 Formula Drift U.S and World Champion.

