

This heavy duty engine dynamometer can extract 300kW of mechanical power from automotive engines, including cars and trucks. Its heavy-duty frame and universal engine coupling shaft are ideal for high torque applications. The air-cooled eddy current dynamometer requires no external cooling lines, and is easy to install and use, giving years of trouble free service. The sophisticated controller can operate the dynamometer from the front panel or from a computer via the remote mode. Control modes include Manual Load, Speed, Torque and Road Load control. The dynamometer can hold the vehicle under test at a given speed for tuning, or fuel consumption measurements, or mimic actual road load conditions. Drive cycle software is included allowing vehicles to be tested on any drive cycle required. Additional inputs are included for Data Acquisition, display and logging. With optional throttle servo motor the dynamometer can run fully automated test cycles.

## FEATURES

- 300kW (40hp) mechanical power absorption
- 600Nm Torque from 500 to 6000 rpm
- Heavy-Duty Universal Joint Coupler
- 5<sup>th</sup> Generation controller included
- Integrated DAQ Input Channels for Logging
- Engine Jacks for easy adjustments
- Free computer software for Graphic Display
- 1 Year Warranty Included

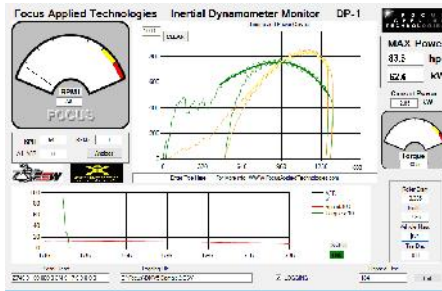


# AUTOMOTIVE ENGINE DYNAMOMETER

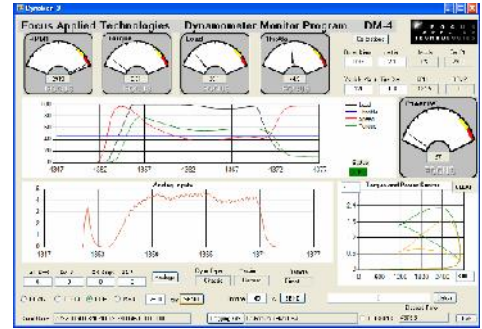
Model AED-300



Typical Application



“Power Pull”



R&D Screen Shot

## SPECIFICATIONS

### PHYSICAL

Weight: 450kg (approx)  
LxWxH: 240 x 60 x 65 cm

### MAINS POWER

Voltage: 120/240VAC  
Frequency: 50/60Hz  
Current Draw: 30/15A max

### CONTROLLER OUTPUT

Controller Power: 3.5kW (100V, 35A)  
Coms: 9600 baud, 8bit, NP

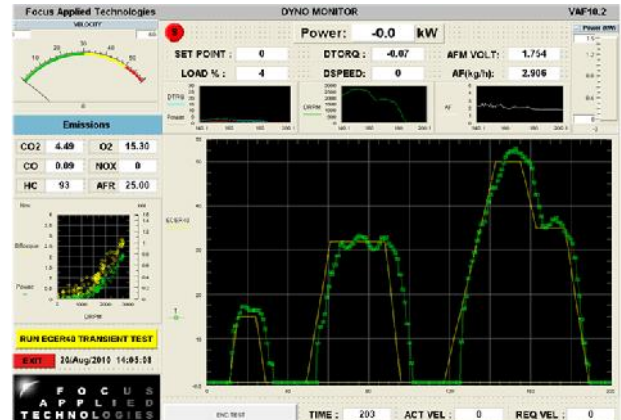
### DYNO

Mechanical Power: 400hp max  
Torque: 600Nm max  
Speed: Hall Effect, 5V excitation  
30 pulse per revolution  
3,500 rpm, 200kph maximum  
Load Cell: 1000Nm, 200 to 500 ohm  
4-wire Wheatstone bridge  
5 or 10V excitation

### ENVIRONMENTAL

Temp: 10 to 40° C Operational  
0 to 50° C Non-Operational  
Humidity: 5 to 90% Non-condensing  
Shock/Vibe: <10g

The Automotive Engine Dynamometer is used for testing engines, measuring torque, power, fuel consumption and emissions at various loads. It is extensively used by R&D organizations for tuning engines, as it can hold the engine at a constant load or speed, for long periods of time. The Air-Cooled Eddy Current Dynamometer requires no water lines or external cooling tower, making it easy to install and relocate.



### OPTIONS

- High-volume, low noise blower and stand
- Wide Band O2 (AFR) sensor
- Digital Fuel Scale
- 5-Gas Analyzer
- Combustion Analysis System
- Servo Throttle Motor and Controller