FUELMASTER

ENGINEERED BY syntech

Leading the Way in Automated Fuel Management Technology

FUELMASTER's ® AIM2.4™ technology is without a doubt the leader in automated fuel management. AIM2.4 is a passive system that eliminates inaccurate driver-entered data from the fueling and data collection process. Our AIM module connects directly to a vehicle's OBD port in order to collect vital information that a fleet manager requires. Using this patented technology prohibits fuel going into unauthorized vehicles or containers. In response to demand for a module that can operate in a rugged environment, Syn-Tech's engineers developed the AIM2.4HD™. It is designed specifically for extreme conditions such as those found at hydraulic fracturing sites and in mining operations. There are more AIM modules installed on equipment in North America than any other competitor's passive system. Tens of thousands of AIM units have been installed on U.S. military equipment, as well as on public and private sector fleets. There are two major reasons organizations select *FUELMASTER*; it works and our nationwide support network helps the customer keep it working.

The AIM reports the following extended OBD data, but availability varies between light and heavy duty vehicles:

- Odometer
- Engine Run /Idle/PTO Engage Time
- Diagnostic Trouble Codes
- Check Engine Light Status

- Max Vehicle/Engine Speed
- Min/Max Battery Voltage
- Current Fuel/Coolant/Washer Fluid Level
- Current Transmission/Engine Oil Level

- Min Engine Oil Pressure
- Max Engine Oil Temperature
- Min Transmission Oil Pressure
- Max Coolant Temperature

Our patented AIM module takes the driver out of the data collection process.

1. The driver inserts the fuel nozzle and the AIM module reads the RFID tag on the nozzle.

2. The module transmits the tag ID and vehicle data to the Fuel Management Unit (FMU). The FMU activates the dispenser.

3. The FMU receives the data and records the transaction. The transaction ends when the nozzle is removed.

Contact your *FUELMASTER*® representative today to learn more.

Made in the USA

Syn-Tech recognized a need for a ruggedized AIM for installation on the heavy equipment found in mining and fracking operations. Frequently AIMs used in these industries will not have the protection provided by a vehicle cab, but will be installed outside in severe weather conditions. Consequently, Syn-Tech's engineers designed the AIM2.4HD™ which comes with weatherproof connectors and cables, as well as a stronger housing. Both the AIM2.4HD and the AIM2.4™ can be purchased with an external antenna to permit RF transmission around obstacles.

All components of AIM2.4HD are submersible up to one meter according to IP67 and NEMA 6. The connectors used on this device actually exceed these requirements per IEC 60529 and DIN 400-50-9. This additional protection makes the AIM2.4HD the perfect equipment for applications in extremely harsh environments such as the agriculture, mining, aggregates and fracking industries.

AIM2.4™ / AIM2.4HD™ Technical Specs

ENVIRONMENTAL	• Temperature Rating: -20°C to 85°C
CERTIFICATIONS	• Certified to SAE J1455 JAN2011 – *Recommended Environmental Practices for Electronic Equipment Design in Heavy-Duty Vehicle Applications* — 4.1.3.1 Temperature Cycling — 4.1.3.2 Thermal Shock — 4.1.3.3 Thermal Stress — 4.10.4.2 Mechanical Vibration — 4.11.3.4 Mechanical Shock • ETL listed to meet: — UL 913 *Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II, and III, Division 1, Hazardous (Classified) Locations* — UL 1238 *Control Equipment for Use with Flammable Liquid Dispensing Devices* • FCC ID: TFB-FREESTAR3 • IC: 5969A-FREESTAR3
ELECTRICAL	• Input voltage range: 12-42VDC • Current draw: Max: 150mA, Typical: 100mA, Power save: 25-45mA • Analog chronometer input range: 4-42VDC
WIRELESS SPECIFICATIONS	• 2.4GHz ISM band • Direct Sequence Spread Spectrum (DSSS) • 100 mW max output
OBD STANDARDS SUPPORTED	• Light duty: ISO 15765 (CAN), ISO 9141, J1850, J1979 • Heavy duty: J1939, J1708/J1587
ADDITIONAL FEATURES	• Tracks the odometer via the OBD port or vehicle speed sensor • Reports up to 18 different OBD parameters. Examples include max vehicle speed, current oil level, minimum oil pressure and check engine light status • Captures all engine trouble codes via the OBD port (supports J2012, J1587 and J1939) • Tracks up to three chronometers simultaneously (via OBD or analog inputs) Examples include: — Idle time — Engine run time — PTO time • Supports up to two tanks with a single AIM