

GreenShield™ Catalyst Monitor

for RICE NESHAP Compliance

Standard Design Specifications

The GreenShield™ Catalyst Monitor displays and records exhaust gas temperature and catalyst differential pressure—a requirement for RICE NESHAP compliance. Pressure and temperature signals are received from sensors located upstream and downstream from the catalyst. Catalyst inlet temperature and differential pressure are displayed textually on the monitor screen and logged on a microSD memory card. If the catalyst temperature or differential pressure is out of recommended ranges, warnings and alarms will be displayed textually and with external lights.

The GreenShield™ Catalyst Monitor is compatible with sensors integrated into UniversalAET catalyst products.

Features:

1. Programmable Logic Controller (PLC) with integral Human Machine Interface (HMI)
2. Orange light to indicate temperature or pressure warning
3. Red light to indicate temperature or pressure alarm
4. “Attention required” Form A dry contact set (internal)
5. Circuit breaker protected power lines
6. Ability to mount remotely from engine
7. microSD card to for easy access to thousands of hours of logged data
8. Temperature and pressure signals can be read by SCADA systems using Modbus RS-485
9. Automatic temperature averaging for RICE NESHAP compliance



The GreenShield Catalyst Monitor provides data logging, text readouts and color-coded visual alarms.

Specifications:

Enclosure: Dimensions: 11.81” X 11.81” X 5.91” (300 X 300 X 150 mm)
 Mounting: (4) 8.2 mm diameter holes,
 Horizontal spacing = 260 mm
 Vertical spacing = 320mm
 NEMA 4 rated

Remote communication: Modbus RS-485 (read only)

Environmental requirements: PLC must be protected from UV degradation (optional internally-mounted PLC with view port door available).

The Monitor enclosure must be located in an operational environment of 0 to 50°C (32 to 122°F). If the minimum temperature cannot be ensured, an optional enclosure heater is required.

Electrical requirements: 100-240 V AC power must be supplied to monitor enclosure
 18 [AWG] shielded twisted-pair wire (not included) should be used to connect the monitor to the sensor enclosure located on the catalyst unit

Weight: 7.7 kg (17 lb)

Part Numbers:	1000015307 RICE NESHAP Catalyst Monitor Assembly,	\$3,500 List
	1000016443 RICE NESHAP Monitor Assembly for Dual Exhaust Engine	\$5,000 List
	1000016444 RICE NESHAP Monitor Assembly with Enclosure Heater	\$4,500 List
	1000016537 RICE NESHAP Monitor Assembly for Dual Exhaust Engine with Enclosure Heater	\$6,000 List

Delivery Time: 2-4 weeks

These specifications represent Universal Emission Technologies’ standard design. Universal Emission Technologies can provide custom designs to meet your specific system performance requirements