

CONTAMINATION MONITORS

HY Series

HY-TRAX® – Telematics Communications Module with Remote Controlled Sampling System



Features and Benefits

- Provides Remote Visibility to the Fluid Condition of Critical Systems.
- Integrated micro VSD (Variable Speed Drive) driven, pump/motor provides optimal flow for accurate sensor readings in variable conditions.
- This HY-TRAX® Remote Oil Contamination Sensor Package allows remote access via the internet and smart devices to fluid particle counts, temperature, and percent water saturation levels (optional) displayed on a customizable dashboard. The fluid sampling system collects data and the communications module transmits this data via GSM cellular at scheduled intervals. Users can receive alerts via email when a fluid's ISO contamination code or water saturation level (optional) reaches user defined critical levels. The unit can sample fluid directly from a fluid reservoir or low pressure line (<50 psi).
- The Communications Module automatically controls fluid flow to compensate for viscosity changes due to temperature or fluid type. All data is transmitted through a secure VPN and archived in a protected database in the cloud to allow real-time and historical analysis.
- The HY-TRAX® Communications Module will provide maintenance managers with the visibility and vital information necessary to proactively schedule preventative maintenance on local and remote equipment. Maintenance decisions can now be based on accurate and real-time data.
- The communications module components are mounted and housed in a rugged IP 40 enclosure.
- Fluid sampling system standard with Fluorocarbon elastomer (FKM) seals.
- Fluid viscosities up to 1623 SUS (350 cSt).
- 50 psi (3.5 bar) max. working pressure.
- Flow control valve providing optimal pressure for accurate sensor readings.

Applications

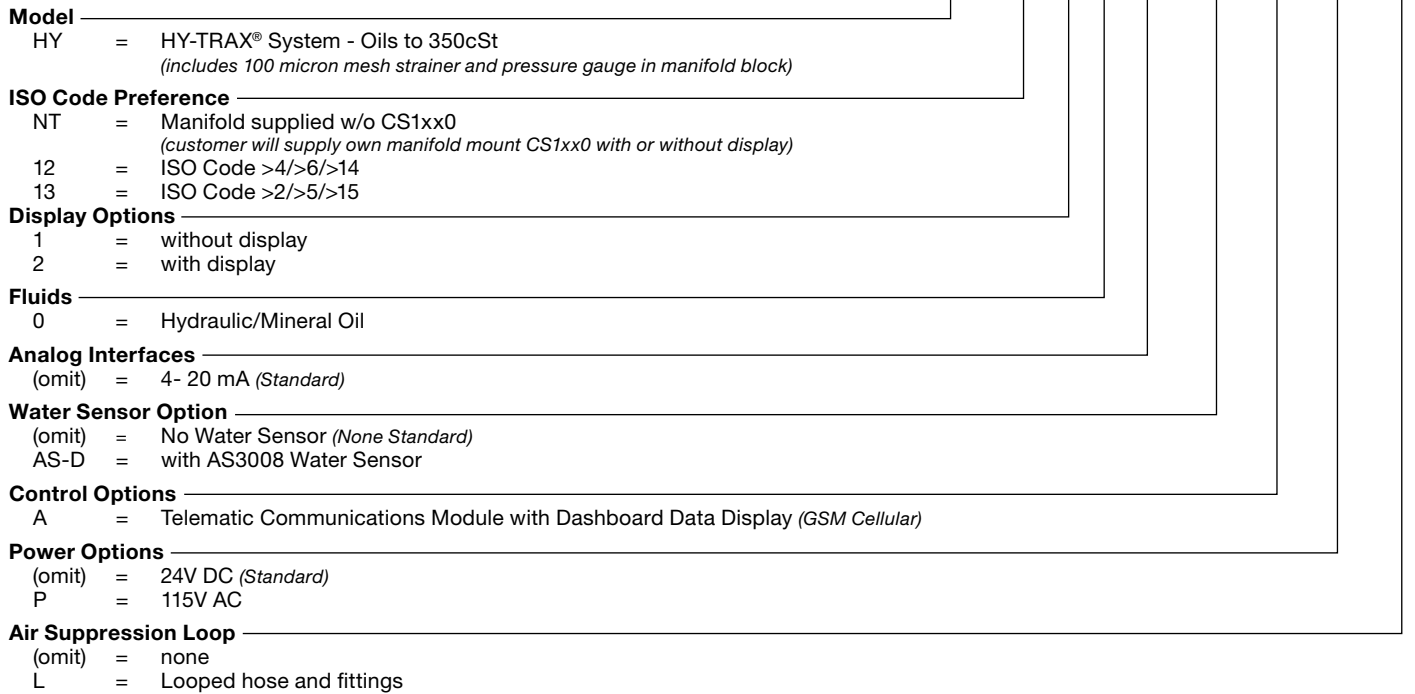
- Mobile Equipment Technology
- Surface Mining
- Construction
- Monitoring of Oil Cleanliness in Storage Tanks
- Fleet Services
- Rail

Technical Specifications

Measuring Range	Display ISO ranges between 25/24/23 and 9/8/7 Calibration within the range ISO 13/11/10 to 23/21/18	
Contamination Output Code	Standard: ISO 4406:1999 or SAE AS 4059(D) Optional: ISO4406:1987; NAS 1638 and ISO 4406:1999	
Self-Diagnosis	Continuously with error indication via status LED	
Pressure Rating	50 psi (3.4 bar) max	
Fluid Inlet/Outlet	SAE ORB, Size 4	
Seal Material	Fluorocarbon elastomer (FKM)	
Pump Speed	500-5000 RPM (adjustable)	
Optimal Sampling Pump Flow Rate	0.008-0.079 GPM (30-300 mL/min)	
Fluid Temperature Range	32°F to 185°F (0°C to +85°C)	
Ambient Temperature Range	-22°F to 176°F (-30°C to 80°C)	
Max Viscosity	1622 SUS (350 cSt) max.	
Pump Type	Gear Pump	
Power Supply	24 volts DC	
Power Consumption	4A	
Communications Module Signal Output	GSM cellular Communication to monitoring website	
Electrical Safety Class	III (low voltage protection), IP 40 enclosure	
Cellular Communications	AT&T Quad Band GSM (850, 900, 1800, 1900 MHz)	
Weight and Dimensions		
Communications Module Control Sensor	HY-TRAX® Communications Module	Fluid Sampling Manifold w/ Communications Module & VSD Pump/Motor
	10 lbs. (4.5 kg)	20 lbs. (9.1 kg)
	14.7" x 11.3" x 5.25" (374 x 287 x 133 mm)	

Model Code

HY - 12 1 0 - - A - -

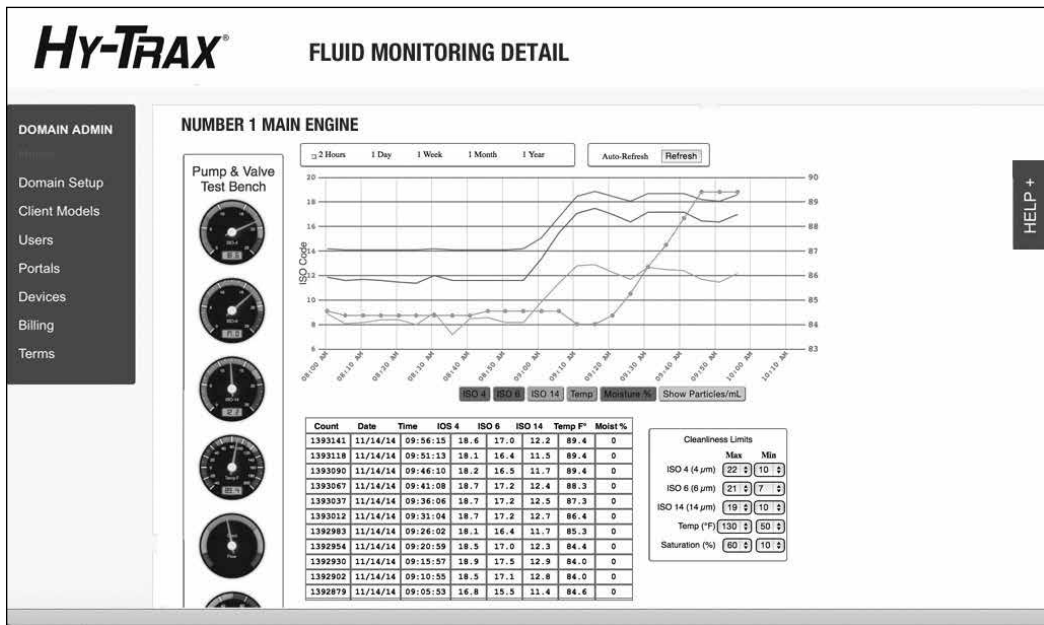


What's Included

- CS1000 Series Contamination Sensor
- Flow Control Valve
- GSM cellular communications
- VSD pump/motor
- Machined, 6061-T651 aluminum alloy manifold block with anodized surface treatment
- CS1000 Series Contamination Sensor (CS1000) Communications/Power Cable
- Specially designed fitting for mating to pump/motor
- Plugged water sensor port (G3/8 BSPP)
- IP 40 enclosure
- Water sensor (optional)
- 24V DC standard with optional 115V AC Power Supply
- Optional Water Sensor (AS3008) Communication/Power Cable
- Side or Front Inlet/Outlet Porting (SAE Size 04 ORB)

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Example of HY-TRAX® Communications Modules Dashboard Contamination Chart



Example of HY-TRAX® Communications Modules Dashboard Gauge Panel

