

SPECIFICATION SHEET

MS3510 ONLINE OIL DEBRIS MONITOR

Performance

Sensor Bore	25mm (1 inch)
Minimum Detectable Particle (sphere)	260µm Fe / 670µm NFe
Minimum Detectable Particle (ESD) ¹	170µm Fe / 435µm NFe
Flow Rate	10 L/min - 300 L/min (2.6 USGPM to 79 USGPM)
Flow Direction	Bi-directional
Maximum Particle Detection Rate	Configurable up to 100 particles/sec

¹The Equivalent Spherical Diameter (ESD) of an irregular shaped object is the diameter of a sphere of equivalent volume.

Electrical Interface

Input Power Supply	18 to 30 VDC
Power Consumption	2.4W

Communication

Ethernet 10/100 Mbit/s

Serial RS-485 (Optional)

Particle Type Discrimination
Particle Size Reporting
Particle Mass Reporting
Equipment Condition Indication

Modbus TCP

Modbus RTU

Ferromagnetic (Fe) / Non-Ferromagnetic (NFe)
Configurable Fe / NFe size bins and Fe / NFe Rate
Fe Mass and Fe Mass Rate
Configurable Alarm and Warning Limits
(Fe, NFe & Temperature)

MS3000 Digital Outputs

PULSE
BIT State
 Fault
 No Fault
Signal Amplitude
Load Impedance Required

Particle Pulse and Built-in-Test (BIT)

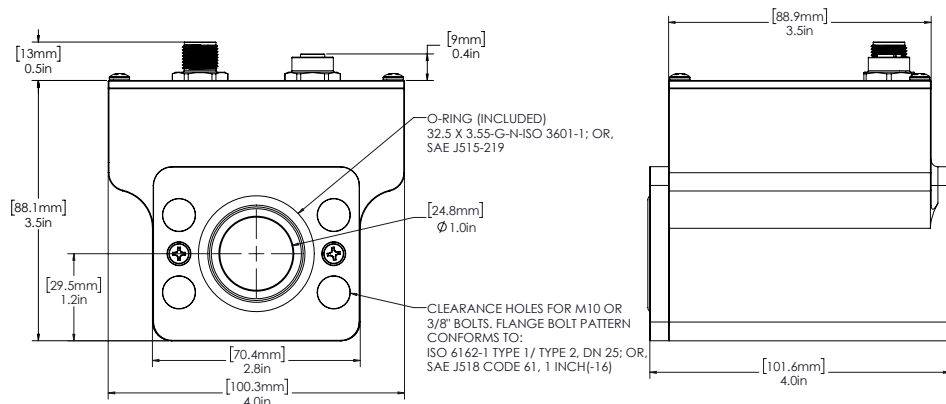
5 ms Square Wave Pulse ± 2 ms
Hi-LO Logic
Low Logic
High Logic
Power Supply Voltage +0/-2 VDC
High (≥ 1 kΩ)

Environment

Oil Pressure	Maximum 20 bar (300 psi)
Oil Temperature	-40°C to 85°C (-40°F to 185°F)
Ambient Temperature	-40°C to 70°C (-40°F to 158°F)
Vibration	10-50 Hz: 3mm (displacement) 50-300 Hz: 15g (acceleration)
Fluids Compatibility	Hydraulic & lubrication oils; synthetic & mineral based; solvents & cleaning agents

Mechanical Interface

Weight 1.1 kg (2.4 lbs)



Compliance

Conforms to ASTM D7917
IP66/67



Ordering Information

Sensors

MetalSCAN 3510 Sensor
(Order: MS3510)

MetalSCAN 3510-RTU Sensor
(Order: MS3510-RTU)

Software

MetalSCAN Manager
(included with sensor)

MetalSCAN Monitor
(Order: MetalSCAN-Monitor)

Gastops Connect
(Contact Gastops)

Accessories

M12, A-Coded, 8-PIN, Straight Backshell Cable, 10m
(Order: Cable-3500-A-10-00)

M12, A-Coded, 8-PIN, 90deg Backshell Cable, 10m
(Order: Cable-3500-A-10-90)

M12, D-Coded, 4-PIN to Ethernet RJ45 Straight Connector Cable, 10m
(Order: Cable-3500-D-10-00)

M12, D-Coded, 4-PIN to Ethernet RJ45 90deg Connector Cable, 10m
(Order: Cable-3500-D-10-90)

Application Installation Kits
(Contact Gastops)

Head Office

1011 Polytek Street
Ottawa, ON K1J 9J3
Canada

Nova Scotia

10-109 Williams Avenue
Dartmouth, NS B3B 2E3
Canada

Newfoundland

146A Glencoe Drive
Mount Pearl, NL A1N 4S9
Canada

Europe

Info.eu@gastops.com

Asia

Info.ch@gastops.com

gastops.com

sales@gastops.com | +1 613 744 3530