

Monitor

Oil Condition

Online with the...

PORTABLE OIL DIAGNOSTIC SYSTEM PODS



manufactured by

ARTI[®]



Accurate, **R**eliable, **T**raceable **I**nstruments

- ✓ *Excellent Performance per Japanese Industry Standards*
- ✓ *User Friendly*

Phone: (541) 472-0190 • Fax: (541) 472-0196
E-mail: sales@artinstruments.com
<http://www.artinstruments.com>

The PODS is an intelligent, portable and robust analysis instrument for measuring, storing, and reporting oil condition parameters important for reliable hydraulic systems operation. The PODS monitors oil contamination in the field and provides immediate information concerning the health of the machine under operating conditions, opposed to oil samples analyzed in laboratories, typically taking weeks before they are available, while not reflecting the condition of the oil under operating conditions. Additionally, the PODS provides the means to analyze fluids and lubricants in an online or bottle sampling mode without interrupting operation of the machine.

SPECIFICATIONS

Portable Oil Diagnostic System (PODS)

Number of Channels: 8
 ISO-MTD Size Channels: 4, 4.6, 6, 9.8, 14, 21.2, 38, 68 μm
 ACFTD Size Channels: ~1, 2, 5, 10, 15, 25, 50, 100 μm
 Flow Rate: 15 to 50 mL / min (automatic)
 Light Source: Laser diode
 Calibration: ISO 11171
 Counting Efficiency: Meets JIS B9925:1997
 Concentration Limit: 90,000 particles / mL @ 10% coincidence
 Sample Volume: 3 runs (averaged) of 5, 10 or 20 mL runs (programmable)
 Fluid Temp Range: 0 to 90°C @ 25°C ambient (32 to 194°F) @ 77°F
 Measured Fluid Temperature: 0 to 100°C, $\pm 0.5^\circ\text{C}$ (32 to 212°F) @ $\pm 0.9^\circ\text{F}$
 Viscosity Range: 10 to 434 cSt (461 to 2000 SUS) $\pm 20\%$ at value
 Wetted Materials: Aluminum, stainless steel, sapphire, PTFE, and Aflas
 Cleanliness Classification: ISO 4406-1991, ISO 4406.2-1999, NAS 1638, MIL-STD-1246C, NAVAIR 01-1A-1
 Data Storage: 500 Sample Records
 Housing: Cast Aluminum; carry handle; removable shoulder strap; internal thermal printer
 Dimensions: 8"(d) x 13"(w) x 14"(h) (20.0 cm x 33.0 cm x 35.5 cm)
 Weight: 25 lbs (11.5 kg)

Input/Output:

Serial Communication RS232
 Option Connector: +12VDC @ 25 mA; four, 12-bit analog inputs (0-5 V); +5 VDC @ 25 mA;
 Digital Output (open collector)

Bottle Operation:

Purge Volume: 15 to 30 mL (Automatic)
 Cartridge: CO₂, replaceable, rechargeable
 Operating Time: 60 samples (120 mL sample bottle)
 Shop Air: 7 to 9 bar (90 to 110 psi) clean, dry

Online Operation:

Fluid Pressure: 7 to 420 bar (90 to 6000 psi)
 Purge Volume: Programmable
 Operating Time: Programmable, hold time and sample number

Power:

DC Input: +24 VDC, 2A
 AC Adapter: Universal 100 – 240 VAC, 50 – 60 Hz, 60 W
 Rechargeable Battery: Nickel-Metal Hydride
 Continuous Operating Time: 100 samples or 4 hours
 Recharge Time: 2.5 hours

Environmental Conditions:

Operating:
 Relative Humidity: 20 to 85% non-condensing
 Temperature: 0 to 50°C (32 to 122°F)
 Storage:
 Relative Humidity: Up to 98% non-condensing
 Temperature: -40 to 70°C (-40 to 158°F)

Accessories:

- Carrying Case
- CO₂ Bottles
- Sample Bottles
- High Pressure Hose Adapter
- Hand Pump
- Display Cover (Optional)

Standard: CE compliance

manufactured by

ART II



ART Instruments, Inc.

1055 Redwood Avenue • Grants Pass, OR 97527
 Phone: (541) 472-0190 • Fax: (541) 472-0196
 E-mail: sales@artinstruments.com
 http://www.artinstruments.com

distributed by

