



CAMON1 Series

Portable Oil condition Monitor



Description and features

Portable oil condition monitor, for online sampling and analysis of the oil of the hydraulic system.

- Contamination classes: up to ISO 22 , NAS 0 to 12
- Computer compatibility: IP68-rated RJ45 connection that may be connected to a laptop computer's RJ45 LAN port using the 2 m cable supplied.
- Start-up time min 10 s. Measurement period: default 30 s; data logging time 15 s
- Fluid connection interface: INLET 6mm push-fit, DRAIN 4 mm push-fit
- Moisture sensor: linear scale within the range 5% RH to 100% RH
- Onboard data storage every second. Output via RJ45 connection
- Power requirement: regulated power supply supplied with the unit
- Re-calibration and Servicing – Annual certification by an approved Service Centre recommended every 12 months.

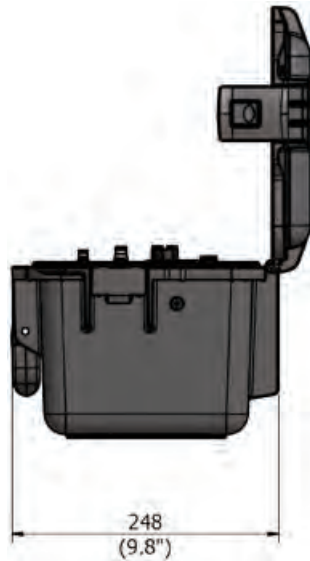
Materials and operation features

- Working pressure: 2,5 to 350 bar. Pressures above 2,5 bar require the use of Pressure reducing valve CAPRV (supplied with unit)
- Compatibility: mineral oil and petroleum based fluid
- Viscosity range: 1 to 300 cSt.
- Flow range: 40-140 ml/min; controlled at 60 l/min by internal pump
- Operating temperature: +5 to +80°C
- Ambient temperature: -30 to + 80°C
- Operating humidity range: 5% RH to 100% RH
- Weight: 5,5 Kg.

Ordering information

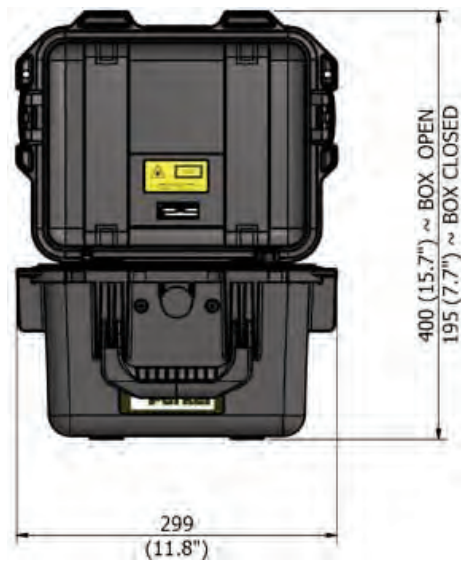
COMPLETE UNIT	
CAMON1	Portable Oil Condition Monitor (MTD calibrated)
ACCESSORIES ON DEMAND	
CAMON1UKPP	UK Power Pack (2 m cable)
CAMON1USPP	US Power Pack (2 m cable)
CAMON1RJ45	RJ45 LAN connector cable
CAMON1CAST	Carry strap
CAMON1VEFL	Verification fluid

Specification



The supply includes:

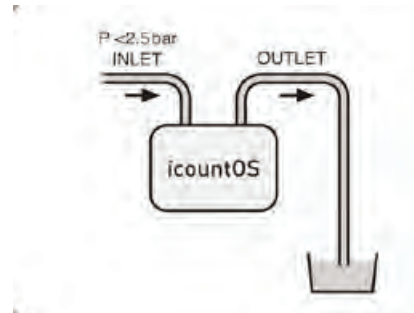
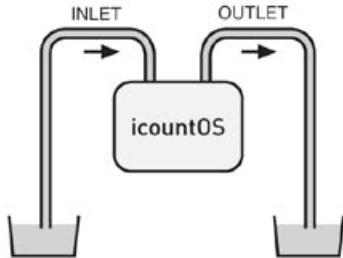
- Self contained monitor unit
- Low pressure hoses
- High pressure hoses
- Pressure reducing Valve (CAPRV)
- RJ45 LAN cable
- EUR Power Pack Supply
- CE certification



Operation

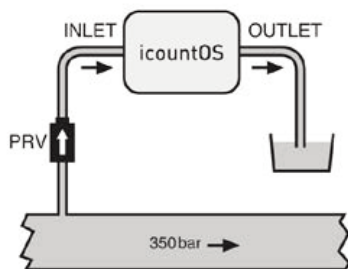
Connecting the CAMON1 is quick and reliable. The fluid connectors are on the front panel, with two secure push fittings: 6 mm diameter inlet and 4 mm diameter outlet/drain.

CONNECTION SETUP FOR PRESSURE UP to 2,5 bar



We recommend that the CAMON1 is positioned in a safe, stable area, as close as possible to the system output and only the hose fittings provided are used.

CONNECTION SETUP FOR PRESSURE FROM 2,5 bar to 350 bar



We recommend that the CAMON1 is positioned in a safe, stable area, as close as possible to the system output and only the hose fittings provided are used; high pressure hose assemblies and the Pressure Reducing Valve are required.

Data download management

No special software needed. Embedded web page generator for data download onto any PC or laptop via a universal RJ45 connection interface. Utilising a computer's Internet Explorer utility, simply plug in the supplied network cable, open Explorer and enter the dedicated IP/MAC address.

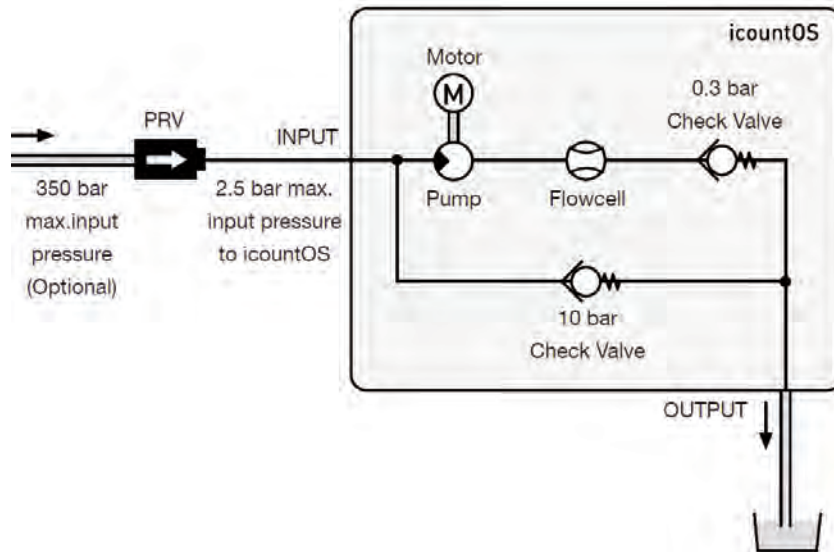
After registering the product at www.parker.com/unlock, you can access your:

- DATA LOG PAGE (Start and Stop data logging - Save data in TXT, CSV or XML format- Clear data logging memory – List of the five last samples taken _ Memory usage)
- UNIT STATUS PAGE (List of current values for various parameters for the connected unit.)
- CONFIGURATION PAGE (Alarm limit settings for 4, 6 and 14 $\mu\text{m}(c)$ – Alarm limit setting for Relative Humidity _ Measurement period – Data logging interval _ Unit name – Unit location)
- CONFIGURATION SET REPORT STANDARD PAGE (Select either the ISO4406:1999 or NAS1638 standard)

 **FILTREC**[®]
under PARKER Technology



How does the Automatic Particle Counter works



The CAMON1 uses light obscuration, light blockage technology. A light source is projected through a moving column of oil. Contaminants in the fluid interrupt the light beam, casting images on a photo diode cell, where the resulting change in light intensity produces a directly proportional change in electrical output.



- 1) A controlled column of contaminated fluid enters the laser optical scanner chamber, maintaining contamination distribution within the fluid.
- 2) On reaching the photo diode cell, the highly accurate laser light is applied and projected through that oil column. The laser diode projects an image of the sample onto a photo diode cell.
- 3) A cast image or shadow created by the contaminant in the oil creates a measurable change in the light intensity.

Measurements are taken every second as standard, although measurement interval and test period can be defined by the user, with results being reported immediately and updated in real time. The fluid condition is easily identified, by showing measured codes, the sizes per channel in microns_(c), the user definable limits and moisture sensor readings as a % or Relative Humidity.

Data is displayed on a built-in OLED digital display and can also be stored for subsequent upload via the embedded web face interface connecting through an RJ45 cable.

