On Line Oil Monitor OLPC6-1

Monitor oil contamination in real time, plot ISO cleanliness levels and link to PC with interface and trending software. Compatible for connection to most types of oil filtration units, hydraulic & transmission systems.
Simple to use with instant LED readout for visible results and with a built in data storage memory board for downloading all relevant data which enables the user to record data to text files which are then imported in to excel format to create real time reports, in tables and graphs.

Photographs for display purpose only.
Product may differ slightly from that shown

The laser unit is mounted inside a strong , watertight, corrosion & dust proof, Peli® Case manufactured from Ultra High Impact structural copolymer with a 6.4 mm neoprene o-ring and ABS latches that seal perfectly and includes an automatic purge valve for quick equalization after changes in atmospheric pressure. The **Peli 1150 case** is NATO codified and tested to MIL C-4150J (Military Standard), IP-67 (Ingress Protection) and ATA (Air Transportation Association). **Exterior Dimensions**: 232mm x 192mm x 111mm

Fitted internally with inlet/flow and outlet/return mini-mess points, 12 volt plug, 110v & 240v socket with plug in lead with on/off switch and data transfer RS232 socket. The case is also provided with a security padlock.
A rechargeable battery with an integrated on/off switch and connection lead is supplied with mains charger and has an 8 hrs charge.

Optional items:
Peli® shoulder strap:
Fits to the case, particularly useful when accessing equipment from ladders, man-lifts, mobile plant, gantries etc. Leaves hands free for added safety.

Large Peli® Carry Box:
Exterior Dimensions**:** 559x351x229mm Wheeled, pull up handle, transport box with foam cut outs to hold OLPC, data cables, power leads, minimess lines, adaptors, lap top etc.

FEATURES

- ✓ Particle Counter OLPC6-1: Laser: 650nm Class 1 Laser Product to IEC825-1:1993 requirements
- ✓ 110v and 240v compatible with built in voltage transformer for 12 volt power.
- ✓ Rechargeable lithium ion 12 volt battery with on/off switch and power lead.
- ✓ Flow rate of 50-500 ml/minute (above 500ml an external flow control valve is required)
- ✓ Pressure from 1 Bar to 500 Bar
- ✓ Counting Channels: 4 Sizes (switchable) monitor 4µ, 6µ, 14µ, 21µ
- ✓ Records oil temperature
- ✓ For use on low flow, high & low pressure systems.
- ✓ For use with hydraulic, fuel and lube oils (mineral or synthetic)
- ✓ Temperature & Viscosity: -20 to 80^0 C (operating Temperature) 2cSt and greater
- ✓ Unit has LED display for ISO, Temp, Peak and Alarm facility
- ✓ RS232 PC connector and data storage memory board with USB interface cables.
- ✓ Housed in a lockable waterproof Peli® case
- ✓ Mini-mess test point connectors
- ✓ 2 x 1.5 metre mini-mess test lines supplied
- ✓ DDE Operating and trend software to produce real time reports and monitoring
- ✓ Full instructions and user manual supplied on the installation disc.

Factory Calibration.

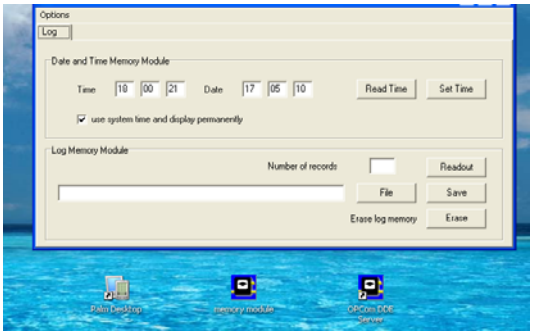
ISO MTD in oil, factory calibrated according to ISO-MTD method. No yearly calibration required. The unit is automatically self calibrating for general use on each start up. Always disregard the first reading as this will not be representative of the current oil in use. It is recommended that every 2 years the unit is checked by the manufacturer or against a calibrated particle counter.

The model OLPC6-1 works from a pressure feed line with a flow rate of 50-500ml per minute, pressure from 1Bar to 500 Bar and runs on 1 to 5 minute cycles (cycle time can be factory pre-set or can be changed using Palm OS PDA) instantly analysing the contaminant particulates at >4, >6, >14, >21 micron ratings. The technology is proven laser light extinction. For higher pressure or higher flow circuits a flow control valve is required. For compatibility to other fluids e.g. phosphate ester, Skydrol, alternative seal options are also available.
The unit has a built in alarm system which can be set to alert when contamination level exceeds requirement or when filtration reaches desired level.
For factory applications this can also be linked to a remote alarm switch when contamination increases/decreases to a pre-set level
The unit can be used as a field service portable, workshop portable or as a permanent wall mounted.

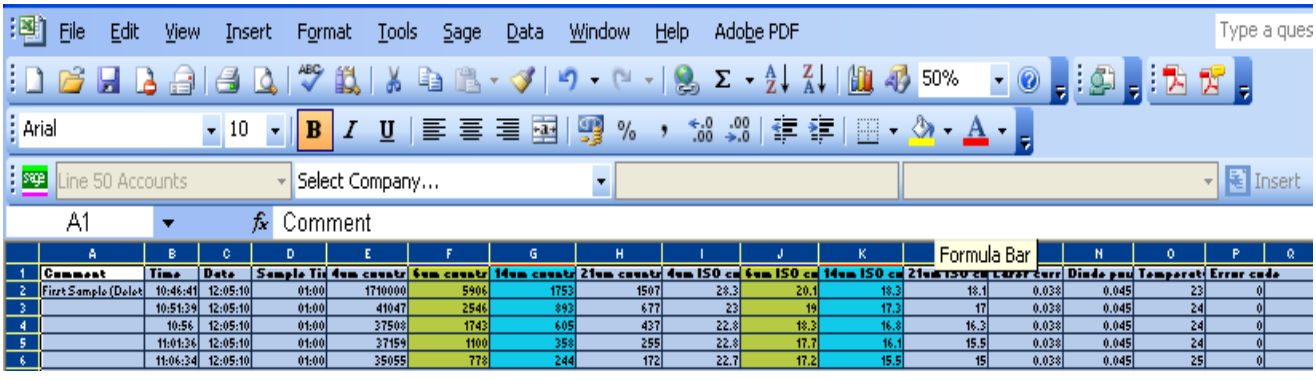
BENEFITS

- Instant readout and on line monitoring
- Reduces time in identifying contamination
- Reduces maintenance downtime
- Cost effective
- Portable and lightweight
- Easy to operate
- No yearly calibration fees
- Technical support guaranteed
- Low maintenance (no moving parts)
- Long life laser
- Rugged construction

View Data in Graphic or Table format.
Ideal work tool for engineers who wish to maintain accurate records of machinery and equipment.



Transfer of Data
Connect data transfer cable, open programme and download stored information from the memory to text file. Erase memory for next operation.
Transfer data from text file to excel and create graphs and tables to issue reports.



Comment	Time	Date	Sample Ti	4um counts	6um counts	14um counts	21um counts	4um ISO co	6um ISO co	14um ISO co	21um ISO co	Laser Curr	Diode pwr	Temperatu	Error code
First Sample (Delet	10:46:41	12:05:10	01:00	1710000	5906	1753	1507	28.3	20.1	18.3	18.1	0.038	0.045	23	0
	10:51:39	12:05:10	01:00	41047	2546	893	677	23	19	17.3	17	0.038	0.045	24	0
	10:56	12:05:10	01:00	37503	1743	605	437	22.8	18.3	16.8	16.3	0.038	0.045	24	0
	11:01:36	12:05:10	01:00	37159	1100	358	255	22.8	17.7	16.1	15.5	0.038	0.045	24	0
	11:06:34	12:05:10	01:00	35055	778	244	172	22.7	17.2	15.5	15	0.038	0.045	25	0

Create templates and design your own reports, create graphs and charts to identify trends and monitor separate pieces of machinery. File created will record data transfer time/sampling period and date, actual particles per ml in 4,6,14 & 21 micron ranges, ISO codes in 4,6,14 & 21 ranges, oil temperature, laser current, diode power and any error codes.

Software & Cables

Supplied with the particle counter is a CD-rom with all associated programmes, instruction manual and data transfer instructions.
Data transfer cables with RS232 and USB interface connections.
No license fees are payable.
Up to four separate OLPC6-1 units can be logged on to one computer on one programme.
A laminated sheet with a simple user guide is also supplied.

Warranty

A full manufacturers 12 month warranty on all parts applies. Conditions may apply relating to mis-use or wilful damage. As with all sensitive electrical equipment care must be taken not to drop the unit as this could damage the laser unit.

Important Note

In order to protect the laser diode, the unit will automatically adjust the "Duty Cycle" as temperature increases. The Duty Cycle is the ratio of the Sample Period to the total time between data output (which is the sum of the Sample Period and the Sample Hold, or hold time). When the operating temperature exceeds 60 °C, the Duty Cycle will decrease to 50%; above 70 °C, the Duty Cycle drops to 25%; above 75% the Duty Cycle drops to 10%; and at 80 °C, the Duty Cycle drops to 0.1%.
The unit adjusts the Duty Cycle by changing the Sample Hold time only. The Sample Period will not change.
It is important to note that if the sensor detects a temperature above 80 °C, it will go into a 0.1% Duty Cycle and will be dormant for an extended period of time – approximately 17 hours, using factory settings. The unit will NOT check the operating temperature again until the end of the cycle. For example, if a unit with factory settings detects an operating temperature of 42 °C, it will output data every five minutes: 1 minute of sampling and 4 minutes of hold time.
If the operating temperature rises to 72 °C, the unit makes no changes. Above 70 °C, the unit is forced into a 25% Duty Cycle. However, the factory setting is already at 20%, so there is no change to the operation of the unit so, the unit would continue outputting data every five minutes.
If, at the end of one of these cycles, the operating temperature were found to be 83 °C, the unit would force a duty cycle of 0.1% by adjusting the Sample Hold to 999 minutes. At this point, the unit will not take another reading for 16 hours 40 minutes. Even if the operating temperature returned to 72 °C after only three minutes, the unit will NOT resume normal sampling for 16 hours 40 minutes. This can, of course, be circumvented by cycling power to the unit; turning the unit off and then on again will reset the unit.

There is a minimum hold time in Raw Data mode of 2 sec. and in Terminal mode of 15 sec

Contact: Andy or Stephen on +44 (0)1246268900, Mobile +44 (0)7779991506 or +44 (0)774821950
E-mail: info@fa-st.co.uk Website: www.fa-st.co.uk & www.howcleanisyouroil.com