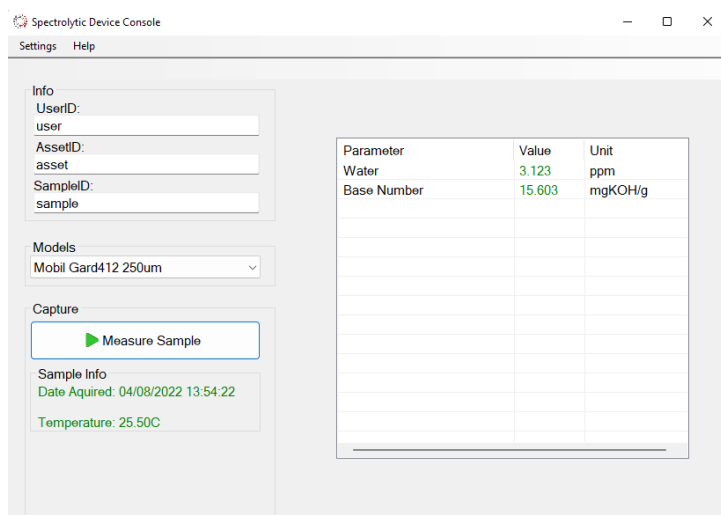


FluidInspectIR[®]

Portable Oil Condition Analyser



Summary Information

- Measurement of key degradation and contamination parameters in oils and lubricants
- Engine, Gearbox, Turbine, Hydraulic oils and others
- Oxidation, Water, TAN, others (see table overleaf)
- Correlates to ASTM / DIN
- System Can be configured For:
 - Group 1-4 Base Oil Stocks
 - Or Polyolester and Phosphate Ester Oils
- Portable and Benchtop operated

Application

The FluidInspectIR[®] analyser measures key oil degradation parameters with the same accuracy and displays these oil parameters in the same units as asset owners are used to from conventional oil laboratories reports. The analyser can be easily configured for most oil types and applications and comes with interchangeable flow-cells depending on the oil application.

How to use

The 2-3ml of oil sample is dispensed into the inlet tubing of the flow-cell via a syringe. The flow-cell is placed into the analyser and the measurement is started from the software.

The software is an easy-to-use GUI ran from a Tablet / Laptop (windows 10).

Specification

GUI:

Software Console provided for use on windows 10 based laptop / tablet (tablet can be provided as option)

Ambient operating temperature & humidity range:

0-70C non -condensing

Power requirement:

Mains chargeable. 2500mAH LiPo battery in device

Analytical spectrum range:

Configuration dependant - 800-4000cm-1

Internal battery capability typical runtime:

250 sample measurements between charge

Compliance:

Correlates to ASTM / DIN

Consumables:

Syringes and containers for oil dispense (5ml)

Sample volume:

5ml

Repeatability:

<+-5% of measured value

Accuracy:

<+-5% of measured value

Methodology Default:

DIN 51453/51451 - can be calibrated to ASTM/DIN

Measurable Parameters:

Note that not all of these parameters can be measured all at once with same device

Measurable Parameters	Correlates to Standard	Unit
Group I-IV Oils including PAO (PolyAlphaOlefins)		
Base Oil Changes		
Oxidation	ASTM E2412, DIN 51453	A/cm or A/0.1mm
Nitration	ASTM E2412, DIN 51453	A/cm or A/0.1mm
Suplhation	ASTM E2412, D7415	A/cm or A/0.1mm
Properties		
TBN	ASTM D664	mgKOH/g
TAN	ASTM D2896	mgKOH/g
ipH		
Viscosity	ASTM D445	mm ² /s
Additives		
ZDDP AW	ASTM E2412	A/cm or A/0.1mm
Phenol / Amine AO	/	%
Others Upon Request	Correlates to reference analysis	A/cm or A/0.1mm, mg/kg or %
Contaminants		
Soot	ASTM E2412	A/cm or A/0.1mm, wt%
Water	ASTM E2412	A/cm or A/0.1mm, wt% or ppm
Ethylene Glycol	ASTM E2412	A/cm or A/0.1mm, wt%
Diesel	ASTM E2412	A/cm or A/0.1mm, wt%
Gasoline	ASTM E2412	A/cm or A/0.1mm, wt%
Group V Polyolester and Phosphate Ester		
Ester Breakdown 1	ASTM E2412	A/cm or A/0.1mm
Water	ASTM E2412	A/cm or A/0.1mm, ppm
Phenol AO	/	%
Amin AO	/	%
TAN	ASTM D2896	mgKOH/g