



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 |

