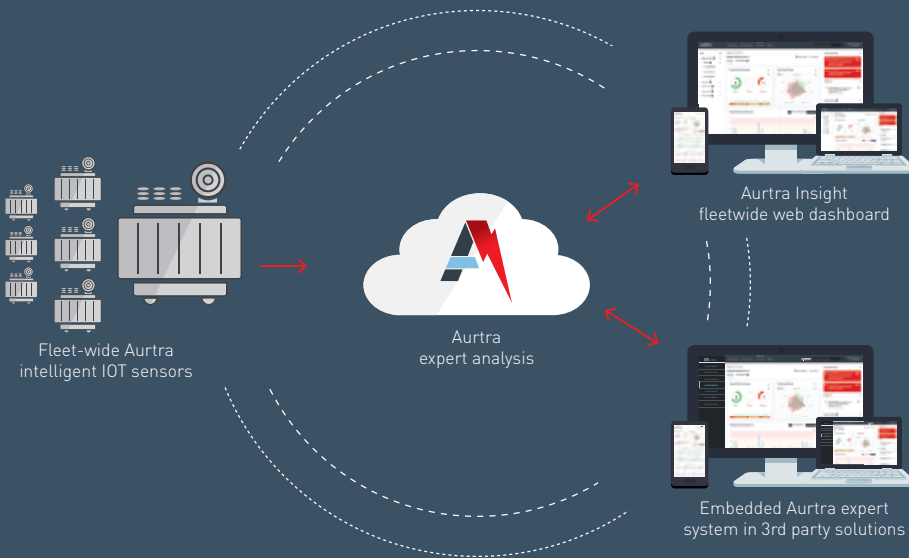


Extend transformer life with confidence

AURTRA TRANSFORMER MONITORING SOLUTION



IOT monitoring and online health analysis

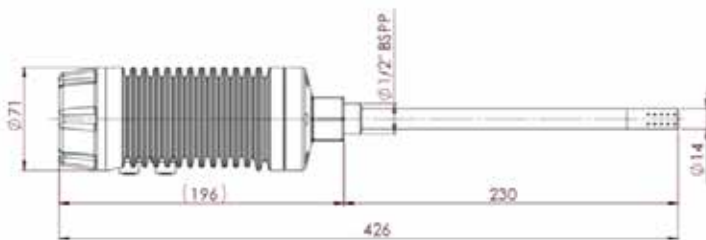
- State-of-the-art accurate transformer monitoring
 - > Water in oil, temperature, vibration, acoustic and RF noise
- Automated online analysis
 - > Temperature, water content of paper profiling for top, bottom and hotspot
 - > Partial discharge and vibration trends
 - > DP assessment and forecast
 - > IEEE, IEC, Rogers, Doernenberg, Duval methods
- Fleetwide dashboard and configurable alerts
- Easy 30 minute installation with automated communications
- Low cost software-as-a-service
- Life-long replacement warranty and software upgrades

- **TRACK OPERATING STATE** and trends mapped against safe limits
- **FORECAST END-OF-LIFE** based on the insulation aging rate with current loading and moisture levels
- **DETECT MAINTENANCE PROBLEMS REMOTELY** with early warning of leakages, cooling system problems
- **DETERMINE OPTIMUM CONDITIONS** for maximum asset utilisation over life with sophisticated scenario tools

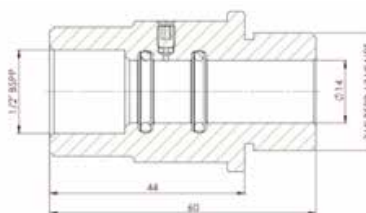
Aurtra HealthSense Intelligent Online Sensor



| | | |
|--|--|--|
| SENSOR MEASUREMENTS | Water Activity, a_w (Relative Humidity) | Measurement Range: 0 – 100 % Accuracy: < 2.0 % (20 – 95 % a_w) at 0 to 100 °C |
| | Oil Temperature | Measurement Range: -30 to 125 °C Accuracy: < ± 0.5 °C at 0 to 110 °C, < ± 2 °C otherwise |
| | External Tank Temperature | Measurement Range: -40 to 100 °C Accuracy: ± 3 °C 10 M cable supplied |
| | Vibration / Acoustic | 50 – 2400 Hz (Tank and connected components) |
| | PD Activity | Correlated multi-band UHF, targeting PD activity inside tank |
| | Magnetic | ± 1.6 mT range (± 16 gauss range) |
| MEASUREMENT PERIOD | | 5 minutes |
| DATA STORAGE | | 8 GB |
| CONNECTIVITY | | 3G / 4G (all available networks) WiFi (optional) |
| LOCAL COMMUNICATION | | RS232, RS485 |
| PROBE LENGTH | | 230 mm (standard) 400 mm (option) |
| LOGGER POWER SUPPLY | | 18 – 65 V DC < 5 W 5-pin M12 all-weather connector Fuse, MOV and reverse polarity protected |
| LV MAINS DIN POWER SUPPLY OPTION (included with standard product) | | Single width DIN rail mount 24V, 15 Watt 110 – 370 V DC 85 – 264 V AC |
| LIGHTNING PROTECTION | | Fuse/MOV/TVS Diode |
| WEATHER RATING (excluding LV Mains power supply) | Ambient Temperature Maximum Pressure Humidity IP Rating | -30 to 60°C 20 bar 100 % non-condensing 67 |
| LOW VOLTAGE CABLE | | 5 m low voltage cable with 5-pin M12 logger connector |
| ADAPTER | | Double O-ring seal with bleed valve $\frac{3}{4}$ " BSPP or $\frac{3}{4}$ " NPT thread options |
| HARDWARE WARRANTY | | Life-long replacement on failure |



Aurtra HealthSense Logger



Adapter (enlarged)

→ Transformer

