Key Benefits

- Designed to provide data consolidation for the critical components providing real-time information which can result in early detection of possible failure.
- Simplified installation, commissioning, and operation with single point accountability.
- Built-in dashboard provides real-time data to track system status and alarms with no software required.
- Provides extensive built-in DGA analytics. The diagnostics include: Duval Triangles, IEC and IEEE standards.
- Thermal and life calculations will be based on top oil, winding temperature (measured or calculated) and load current following the IEEE and/or IEC standards.
C50 OPTIMUS™ COMPLETE SPECIFICATIONS

**Power Requirement:**
110-240 VDC or 110-250 VAC 50/60 Hz

**Temperature Range:**
-40°C to +55°C / -40°F to +131°F

**Communications:**
USB, Ethernet, RS485 (optional), Serial, Fiber (optional), DNP, Modbus, IEC 61850

**DGA Measurement Cycle Duration:**
1-1.5 h (typical)

**Transformer Oil Type:**
Mineral Oil

**Measured Parameters in Oil**
Methane (CH₄), Ethane (C₂H₆), Ethylene (C₂H₄), Acetylene (C₂H₂), Carbon monoxide (CO), Carbon dioxide (CO₂), Hydrogen (H₂), Moisture %RS (H₂O).

**Additional Options**
- iBridge Communications Solution
- Connection to third party devices

### MEASURED PARAMETERS IN OIL

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Range</th>
<th>Accuracy¹,²</th>
<th>Repeatability²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methane (CH₄)</td>
<td>0 to 10,000 ppm</td>
<td>10 ppm or 10% of reading</td>
<td>10 ppm or 5% of reading</td>
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<tr>
<td>Ethane (C₂H₆)</td>
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<tr>
<td>Ethylene (C₂H₄)</td>
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<tr>
<td>Carbon monoxide (CO)</td>
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<tr>
<td>Carbon dioxide (CO₂)</td>
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<td></td>
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</tr>
<tr>
<td>Acetylene (C₂H₂)</td>
<td>0 to 5000 ppm</td>
<td>2 ppm or 10% of reading</td>
<td>1 ppm or 10% of reading</td>
</tr>
<tr>
<td>Hydrogen (H₂)</td>
<td>0 to 5000 ppm</td>
<td>25 ppm or 20% of reading</td>
<td>15 ppm or 10% of reading</td>
</tr>
<tr>
<td>Moisture (H₂O)</td>
<td>0 to 100 ppm</td>
<td>± 2 ppm³ or ± 10% of reading</td>
<td>Included in accuracy</td>
</tr>
</tbody>
</table>

¹Accuracy specified is the accuracy of the sensors during calibration gas measurements. Accuracy of the gas-in-oil measurement may also be affected by oil properties and other chemical compounds dissolved in oil.

²Whichever is greater

³Repeatability of ethane measurement is specified with averaging of five measurements.

⁴Upper range limited to saturation.

⁵Calculated ppm value is based on average solubility of mineral oils.

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**Drawings**

To request a quote, contact your local sales office.