The ULTIMA DTS range is the world’s highest performing family of Distributed Temperature Sensors. The ULTIMA offers the finest temperature resolution and spatial resolutions, from 0.01°C and 25cm, over a wide operating temperature range. It is a standalone unit with an on-board PC and a user-friendly software interface. The ULTIMA is available with either 4 or 8 optical channels. The units are optimised for spatial and temperature resolution for the following ranges: 5, 10, 20 and 35km. The system can be configured to produce both single-ended and double-ended measurements. Minimum measurement time is 1 second.

Product Specifications

Sensing Capabilities

<table>
<thead>
<tr>
<th>Range</th>
<th>Channels</th>
<th>Fibre type</th>
<th>Resolution Temperature</th>
<th>Resolution Sampling</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 5km*</td>
<td>4 / 8</td>
<td>50 / 125 MM</td>
<td>0.01°C</td>
<td>0.125m</td>
</tr>
<tr>
<td>0 - 10km</td>
<td>4 / 8</td>
<td>50 / 125 MM</td>
<td>0.01°C</td>
<td>0.25m</td>
</tr>
<tr>
<td>0 - 20km</td>
<td>4 / 8</td>
<td>50 / 125 MM</td>
<td>0.05°C</td>
<td>1m</td>
</tr>
<tr>
<td>0 - 35km</td>
<td>4 / 8</td>
<td>50 / 125 MM</td>
<td>0.05°C</td>
<td>1m</td>
</tr>
</tbody>
</table>

*The unit is also available with a 0-2km range with an optimised temperature resolution.

Power Supply Requirements

<table>
<thead>
<tr>
<th>AC Power</th>
<th>Maximum Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-240V, 50-60Hz</td>
<td>145W</td>
</tr>
</tbody>
</table>

Communication Options

- Ethernet
- USB
- Display port
- Internal HD

Physical Dimensions [19in rack compatible]

| Height (6.97in / 177.1mm) | Width (18.30in / 464.8mm) | Depth (18.40in / 467.4mm) | Weight (16.9kg / 37.3lb) |

Certification & Compliance

- **Safety**
  - Class 1 Laser Product
    - CFR 21 Parts 1040.10 & 1040.11
    - EN 61010-1:2010

- **EMC**
  - EN61326-1:2013

- **FCC**
  - CFR 47:2008 Part 15 Sub Part B
  - 2014/35/EU (safety)
  - 2014/30/EU (EMC)

Data Monitoring

- ULTIMA DAQ
- ULTIMA Viewer
- Enhanced Viewer