ULTIMA™ DTS

The ULTIMA DTS line is the world's highest performing family of Distributed Temperature Sensors, now fanless with enhanced data storage capacity and low power consumption. The ULTIMA offers the finest temperature resolution and sampling 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. It is available with either 4 or 8 optical channels. The units are optimised for spatial and temperature resolution for the following ranges: 2/5/10km variable range model M, 10/20/35 km variable range model L. The system can be configured to produce both single-ended and double-ended measurements. Minimum measurement time is 1 second.

Sensing Capabilities

Unit	Range	Channels	Resolution		Measurement Time	Fibre Type	External Reference
			Sampling	Temperature			
ULTIMA DTS M	Up to 10 km	4 or 8	25/50cm	0.01°C	≥1 sec	50/125µm multimode	2 x Pt-100 probes
ULTIMA-DTS L	Up to 35 km		1-2 m	0.03°C			
ULTIMA-DTS SM	Up to 30 km			0.1°C		9/125µm singlemode	

System

Operating system	Windows 10 IoT LTSC
Network	2 x 1 Gb/s Ethernet
Storage	Internal SSD [480 GB]
Control and Data Monitoring	ULTIMA DAQ / Viewer / SDK

Operating Environment

Temperature	-5° to +50°C
Humidity	10-85% Non-condensing

Power Supply Requirements

Nominal voltage range	100 to 240 VAC
Power rating measuring	≤ 60 W
Power rating idle	15 W

Physical Dimensions

Height (feet to lid)	191 mm
Width (brackets closed)	436 mm
Depth	457 mm
Weight	14.1 kg

Certification & Compliance

Safety	EMC	FCC	CE Mark
Class 1 Laser Product IEC 60825-1: 2014 EN 61010-1: 2010	EN 61326-1:2013	CFR 47:2008 Part 15 Sub Part B	2014/35/EC (safety) 2014/30/EC (EMC)