Bandweaver

DATASHEET

T-Laser DTS— Singlemode

DISTRIBUTED TEMPERATURE SENSOR

FRONT VIEW

REAR VIEW

Monitored | Secured | Safe

T-LASER SPECIFICATIONS

OVERVIEW				
Range per channel	5km	10km	20km	30km
Number of channels	4 or 8 channels			
Ordering part numbers (4 or channel)	R-DTS-04CH-09-05/TL R-DTS-08CH-09-05/TL	R-DTS-04CH-09-10/TL R-DTS-08CH-09-10/TL	R-DTS-04CH-09-20/TL R-DTS-08CH-09-20/TL	R-DTS-04CH-09-30/TL R-DTS-08CH-09-30/TL
DATA ACQUISITON				
Measurement Time Recommended	>30 sec	> 1 minute	> 4 min	> 10 min
Sampling Interval	1m	1m	1m	1m
Spatial Resolution	1.5m	2m	3m	5m
Temperature Resolution	≤1.0 °C @4 min, ≤1.9 °C @1 min, - 10km ≤1.2 °C @10 min, ≤4 °C @1 min, - 30km			
Smart Alarm Types	Maximum / Minimum / Rate of Rise / Deviation / Fiber Break / System Fault			
No of Zones	1000 zones			
OPTICAL				
Laser Wavelength	1550 nm			
Optical Budget*	12 dB			
Fiber Type	9 / 125 single mode			
Configuration	Single ended or dual ended loop configuration			
Connector	FC / APC			
Laser Safety Classification	1M			
INTERFACES				
Relays	50 output relays: 2x Fault, 4x Fiber break, 44x user programmable			
Modbus	MODBUS TCP / MODBUS RTU			
Ports	3 x 100Mbps RJ45 Ethernet / 2 X RS485 / 1 x RS232 / 1 x USB on the go			
Display/Indicators	5.7– inch touch screen, 640*480-pixel 262k Indicator Alarm/Fault/Laser/Power/ DAQ/CH			

* For optical budget calculations maximum loss per connector/splice is 0.3/0.1dB.

ELECTRICAL / STORAGE	
Supply Voltage	24VDC (18 to 36 VDC)
Power Consumption	25W @ 25°C
Internal Storage	> 500,000 measurements @10km (1m sampling) 32GB
PHYSICAL / SHIPPING	
Operating /Storage temperature	0°C to +40°C / -20°C to +70°C
Operating/Storage humidity	0 to 95% Relative Humidity, Non-condensing
Rack Height	3U
Dimensions (W * H * D)	431 x 131 x 384 mm
Net /Shipping Weight	9 kg / 14kg
IP Rating	IP40 rack mounted / IP54 in wall mounted enclosure
Housing material	Painted Steel / Matt Black
Shipping Dimensions	550 x 300 x 530 mm / Cardboard box
Shipping Weight	14 kg
HS Tarriff Code	9027.50.90
COMPLIANCE STANDARDS	
Laser Safety	IEC60825-1:2014 Class 1
CE-EMC	EC IEC 6100-6-3:2021 / EN IEC 6100-6-1:2019
CE-LVD	N/A
CE-RoHS	(EU) 2015/863 amdning 2001/65/EU
FDA / FCC	CFR47 FCC Part 15 Subpart BANSI C63.4-2014
Laser Safety Classification	
SOFTWARE	
Configuration	DTSCM2
Visualisation	DTSCM2 / MasView (enquire for more details)
Other	Compatible with Bandweaver RTTR (enquire for more details)