PTS Fiber System

FIBER OPTIC LINEAR HEAT DETECTION

Features

- Unique zoning capabilities. A single length of sensor can contain up to 2000 zones.
- Multiple alarm initiating criteria by zone.
- Available with 1, 2 or 4 channels.
- Capable of continuous temperature monitoring in ranges up to 10km (32,800 ft.).
- LAN Interface (TCP/IP) enables remote access from multiple locations.

FUNCTIONAL SPECIFICATIONS						
Distance range[1]	3281 ft (1km)	6560 ft (2km)	13120 ft (4km)	19685 ft (6km)	26246 ft (8km)	32800 ft (10km)
Optical wavelength	1064 nm					
Minimum sampling interval	0.25 m					
Minimum spatial resolution setting	0.5 m					
Measurement time	1 s to 30 s			2 s to 30 s	3 s to 30 s	4 s to 30 s
Optical channels	1 (C1), 2 (C2) and 4 (C4)					
Zones per channel	2000					
Available measurement modes	Single-ended; Double-ended (loop, incl. fiber break recovery, not available with channel option C1)					

HOUSING & ENVIRONMENTAL		
Housing	19” Rack Mount	Wall Mount
Operating temperature range	14°F to 140°F (-10°C to +60°C)	
Storage temperature range	-40°F to 176°F (-40°C to +80 °C)	
Operating humidity range	0 to 95 % r.h. non-condensing	
Dimensions (H x W x D)	3.46 x 15.54 x 15.54 in (88 x 420 x 420 mm)	18.62 x 15.54 x 4.14 in (473 x 420 x 105 mm)
Weight	11 to 15.5 lbs (5 to 7 kg)	15.5 to 20 lbs (7 to 9 kg)
Housing	19” Rack Mount	Wall Mount

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INTERFACES & POWER	
Optical connector / sensor fiber	E2000 APC 8° 50/125 µm graded index MM (OM2/OM3/OM4), ITU-T G.651.1
User Interface	Web browser interface TFT-Display 480x272 pixel 4 front LEDs for power, measuring, fault and alarm 3 rear LEDs for power OK, SD card removable, laser ON
Computer interface	2x Ethernet (LAN 10/100/1000), USB A, USB B
Data storage capacity	512 MB internal, USB HDD/SSD, SD/SDHC card slot
Communication protocol	SCPI, Option P01: Modbus TCP
Relays	Volt-free contacts, 30 V DC, 1 A Included: 4 inputs and 10 outputs Option SR0: 44 additional outputs Option SRR: 88 additional outputs Option TMx: Resistor configuration based on customer requirements
Power	10 V to 30 V DC, 22 W typical at 20 °C ambient temperature, 40 W max

SAFETY	
Laser safety class	Class 1M laser product IEC 60825 1: 2014; EN 60825 1: 2014; FDA 21CFR1040.10+Laser Notice no.50

CERTIFICATIONS			
Fire Certifications		VdS EN54-22, UL 521, FM Approved, CSFM Listing	
Safety Integrity Level (SIL) 2		IEC 61508	
ATEX	Option EX0: Steel armored sensor cable)		I (M1) [Ex op is pr II (1) G [Ex op is pr IIC T6 Ga] II (1) D[Ex op is pr Da]
	Option EX1: Any sensor cable)		I (M2) [Ex op is II (2) G [Ex op is IIC T6 Gb] II (2) D [Ex op is Db]
IECEx	Option EX0: (Steel armored sensor cable)		[Ex op is pr Ma] [Ex op is pr IIC T6 [Ex op is pr
	Option EX1: (Any sensor cable)		[Ex op is Mb] [Ex op is IIC T6 [Ex op is

1. Max. optical loss budget (one way) 1km = 3 dB, 2km = 4 dB, 4km = 6 dB, 6km = 8 dB, 8km = 10 dB, 10km = 12 dB - certifications may require a lower max. permissible loss values of the sensor.
2. Wallmount NEMA 4X (IP66) Housing options:
   - WM-N4X (with window) with operating temp. range -4°F to 140 °F (-20°C to +60°C)

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