FIBRE OPTIC LINEAR HEAT DETECTION
FiberSystem 8000 PTS SERIES CONTROLLERS

FIBERSYSTEM 8000 PTS SERIES CONTROLLER & FIBRE OPTIC SENSOR CABLE

FEATURES

- Unique zoning capabilities – A single length of sensor cable can contain up to 256 zones
- Available with 1, 2, or 4 channels
- Capable of continuous temperature monitoring in ranges up to 10 km
- Multiple alarm initiating criteria by zone
- Programmable custom operating logic
- Graphic display of temperature profile, fire size, and spread using computer interface
- LAN Interface (TCP/IP) enables remote access from multiple locations

APPROVALS

- ATEX
- VdS

APPLICATIONS

- Tunnels
- Cable trays
- Conveyors
- Power distribution apparatus: switchgear, transformers, motor control centres, power cables
- Cooling towers
- Mines
- Pipelines
- Bridges, piers, marine vessels
- Aircraft hangars

DESCRIPTION

The Protectowire® FiberSystem 8000 is a linear heat detection system using state-of-the-art fibre optic sensing technology. The system consists of Type PFS Fibre Optic Sensor Cable and the PTS Controllers with related software. The PTS Series Controllers can be configured for various alarm criteria and can be connected to an approved fire alarm control panel using relay inputs and outputs. The system is specifically designed for high-risk commercial and industrial hazards that demand high reliability and customised system features.

The PTS Controller is housed in a NEMA 1(IP20) type enclosure. The Controller contains the system operating software, transmitter, receiver, and digital processor.

Each PTS Controller is provided with four programmable optically decoupled inputs and 44 voltage free outputs (one dedicated fault relay output and 43 programmable relay outputs) for reporting to a main fire alarm panel or BMS system, or simply for interfacing to other equipment.

The system can be integrated easily into your management platform (eg. SCADA systems) by either directly communicating over Ethernet (TCP/IP) using SCPI (Standard Commands for Programmable Interface), or Modbus RS232, RS422, RS485 and TCP/IP.

Configuration software is provided with each FiberSystem 8000 Controller. This software can be easily adapted to specific customer requirements and offers numerous options for displaying and processing the recorded alarm and temperature data. The software makes it possible to create multiple zones along a single length of sensor cable, select multiple alarm initiating criteria, provide unique alarm visualisation graphics, and to configure zone related alarm generated outputs for event handling.

TECHNOSWITCH
FIRE DETECTION & SUPPRESSION

SPECIFICATIONS

Power Input	DC Power Supply, 10 to 30 V DC
Power Consumption	17 W typical @ 20°C
	Maximum power is <40 W (under all operating conditions)
	UL listed systems require the use of an auxiliary 24 V DC power source capable of providing a minimum of 24 hours of standby emergency power with 10 minutes of alarm.

Environmental Conditions

Operating Temperature Range	−10°C to 60°C
Storage Temperature Range	−40°C to 80°C
Operating Humidity Range	0% to 95% non-condensing
Housing	PTS Controller is mounted in a NEMA 1 (IP20) type enclosure with a textured red finish.
Size	51 x 76 x 18 cm

Interfaces

Optical Connector	E2000; 8° angled
Number of Channels	1, 2, or 4 (depending on model)
Computer Interface	USB, LAN
Relay Board	4 input / 44 outputs (voltage free contacts)
Relay Expansion	Up to 256 relays per channel

ORDERING INFORMATION

Product Code	Product Description
PW-PTS-8101	Fibre Optic Fire Detection Controller – 1 Channel with 1 km range
PW-PTS-8102	Fibre Optic Fire Detection Controller – 1 Channel with 2 km range
PW-PTS-8104	Fibre Optic Fire Detection Controller – 1 Channel with 4 km range
PW-PTS-8106	Fibre Optic Fire Detection Controller – 1 Channel with 6 km range
PW-PTS-8108	Fibre Optic Fire Detection Controller – 1 Channel with 8 km range
PW-PTS-8110	Fibre Optic Fire Detection Controller – 1 Channel with 10 km range
PW-PTS-8201	Fibre Optic Fire Detection Controller – 2 Channels with 1 km range per channel
PW-PTS-8202	Fibre Optic Fire Detection Controller – 2 Channels with 2 km range per channel
PW-PTS-8204	Fibre Optic Fire Detection Controller – 2 Channels with 4 km range per channel
PW-PTS-8206	Fibre Optic Fire Detection Controller – 2 Channels with 6 km range per channel
PW-PTS-8208	Fibre Optic Fire Detection Controller – 2 Channels with 10 km range per channel
PW-PTS-8401	Fibre Optic Fire Detection Controller – 4 Channels with 1 km range per channel
PW-PTS-8402	Fibre Optic Fire Detection Controller – 4 Channels with 2 km range per channel
PW-PTS-8404	Fibre Optic Fire Detection Controller – 4 Channels with 4 km range per channel
PW-PTS-8406	Fibre Optic Fire Detection Controller – 4 Channels with 6 km range per channel

Note: *For Integrated Modbus TCP/IP option, add "A" to the basic PTS Product code, eg.*
PW-PTS-8101A   Fibre Optic Fire Detection Controller – 1 Channel with 1 km range (incl. MODBUS TCP/IP)

Accessories
PW-JB-2S	Joint Box w/ Integral Strain Relief & Splice Tray (NEMA 1 / IP20)
PW-PWC-2000	E-2000 APC 8° Angled Connector with 5 metre Pigtail

Graphics User Interface (Monitoring Software)
PW-PTS-SVGUI	SmartVision Monitoring Software
PW-PTS-SVMC4	SmartVision Multi-Client Software (4 client licences)

Please refer to the PFS Series Fibre Optic Sensor Cable datasheet for detailed information on the fibre optic sensor cable options.

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