FIBERPRO

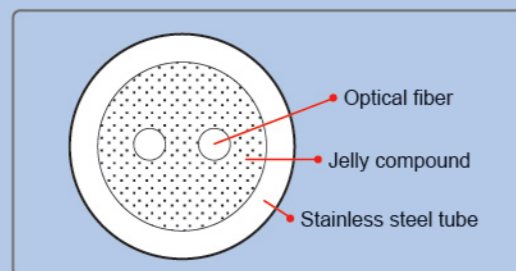## Sensing Cables

Stainless steel loose tube type
- Optical fiber
- Jelly compound
- Stainless steel tube
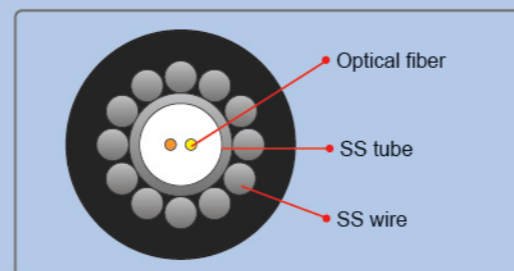
Stainless steel wire armored type
- Optical fiber
- SS tube
- SS wire
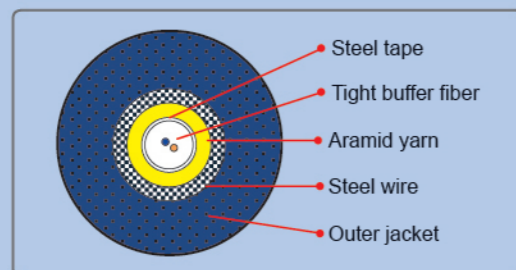
Steel tape and wire armored type
- Steel tape
- Tight buffer fiber
- Aramid yarn
- Steel wire
- Outer jacket

Spiral steel type
- Steel tape
- Tight buffer fiber
- Aramid yarn
- Steel wire
- Outer jacket
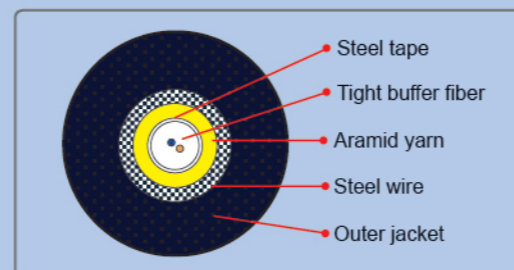
Distributed Temperature Sensing System [DTS]

www.fiberpro.com

TS3000

DTS Series

TS3000   TS3000M   FD3000   Rack System

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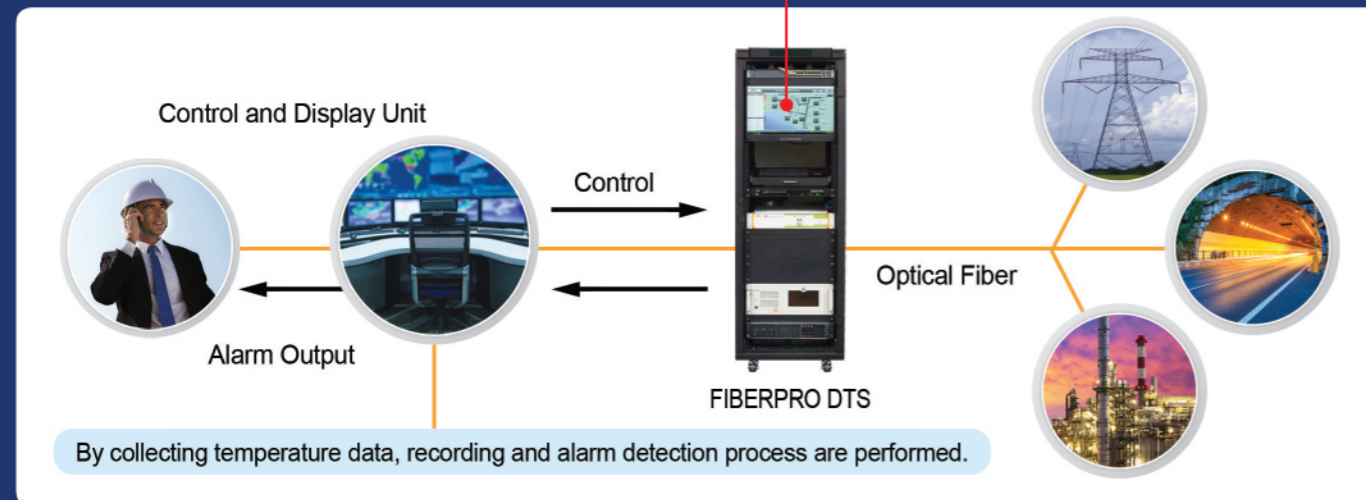sales@fiberpro.com

LEA-TS3000-02

Distributed Temperature Sensing System [TS3000]

FIBERPRO's Distributed Temperature Sensing (DTS) System, TS3000, measure ambient temperatures along the entire optical fiber cable which is functioning as linear sensor. TS3000 provides excellent flexibility to meet clients requirements in various applications.

Features

- Raman scattering based DTS
- Max. 16 channels
- High temp. accuracy
- Wide temp. sensing range
- Insensitive to the electromagnetic interference (EMI)

System Configuration

Control and Display Unit

Control

Optical Fiber

FIBERPRO DTS

Alarm Output

By collecting temperature data, recording and alarm detection process are performed.

Applications

▪ Tunnel & Large facility fire surveillance
▪ Power plant & Tower temperature monitoring
▪ Factory temperature state monitoring
▪ Oil & Gas pipeline surveillance of leaks
▪ Geothermal temperature monitoring
▪ Others

Specifications

Performance	
Distance Range	5 km, 10 km, 15 km [0]
Measurement Time	10 ~ 600 sec
Temperature Resolution (1σ)	< 0.5°C [1]
Temperature Accuracy	< ±2°C (P to P) [2]
Minimal Spatial Resolution	< 2 m @ 2.3 km
Minimum Sampling Interval	0.5 m, 1 m
Sensing Temperature Range	-200°C ~ +700°C [3]
Hardware	
Number of Channel	1, 2, 4, 8, 16
Sensing Fiber Type	MMF 50 / 125 um (Graded index)
Connector Type	E-2000/APC, FC/APC or SC/APC
Operating Temperature	-20°C ~ +60°C
Storage Temperature	-40°C ~ +85°C [4]
Electrical Power	AC 100 ~ 240 V, < 250W Typ.
Dimensions (W x D x H)	600 mm × 1000 mm × 1800 mm (Rack cabinet)
	445 mm × 435 mm × 177 mm (TS3000 only)
Weight	< 10 kg
Certification	KC (including KFI), CE
Interfaces	LAN, RS-232 (Data reading only)

0) Ask us for longer distance
1) Measurement time 600 sec, standard deviation over distance
2) Measurement time 60 sec
3) Depending on sensing fiber coating material
4) Non-condensing
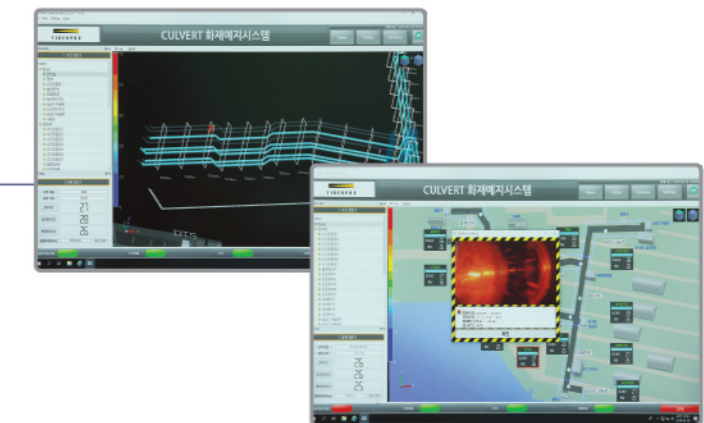
Ordering Code

TS3000 - (1) - (2) - (3) - (4)

1. Distance ➡ 5 km(5), 10 km(10), 15 km(15)
2. The number of channel ➡ 1ch(1), 2ch(2), 4ch(4), 8ch(8), 16ch(16)
3. Port location ➡ Front(F), Rear(R)
4. Connector type ➡ E-2000/APC(E/A), FC/APC(F/A), SC/APC(S/A)