Temperature-sensing optical cable for tunnels

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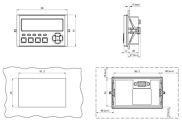
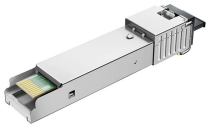
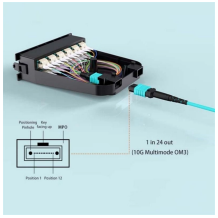
	DTSX measures temperature distribution over the length of an optical fiber cable using the fiber itself as the sensing element and it is ideal for temperature monitoring over long distances and wide areas.
	In practice, temperature sensing optical cables are laid in the direction and circumference of the tunnel. The temperature field distribution along the tunnel and in the whole ...
	It applies to resettable linear heat detectors consisting of a sensor element with fibre optic cable and designed for fire detection and fire alarm systems in building construction and civil ...
	EMBOSS cables are built with armored layers such as galvanized steel or stainless steel to withstand mechanical stress, moisture, chemicals, and temperature extremes — ideal for tunnels, pipelines, ...
	Distributed Temperature Sensing (DTS) systems provide temperature information for accurate thermal monitoring, fire detection, and condition assessment by utilizing standard fiber optic cables.

It is important that the sensing cable is installed carefully so that the cable parameters are not exceeded. Depending on the tunnel size and dimensions, one or two cables may be required.



To improve the monitoring of power cable temperature, this paper presents the research of an online intelligent monitoring system of tunnel power cable temperature based on fiber grating.

Our DTS sensing cables are designed and manufactured in-house using high-precision equipment, resulting in better optical performance, consistent quality, and on-time delivery for projects globally.

Layout of temperature sensing optical cables in interval tunnels. The heat sources for sensing environmental temperature through temperature sensing optical fibers include radiative heat and ...

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SAMM Teknoloji''s FOTAS solution provides fiber optic linear heat detection engineered specifically for tunnel and metro environments. By delivering continuous temperature profiling and ...

	Distributed fiber optic sensors (DFOSs) possess the capability to measure strain and temperature variations over long distances, demonstrating outstanding potential for monitoring ...

Contact Us

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