

## **Ensure DTS Sensing System**

Model: ES-PS-DTS-30KM-MA-SM-FC/APC

The single-mode DTS fiber optic sensing system offers exceptional long distance (up to 30 km per channel), accuracy and reliability. It features a wide operating temperature range and low power consumption.

Each DTS instrument undergoes thorough testing before being shipped to ensure that it meets the specifications outlined in this datasheet.





### Sensing Capabilities:

Parameter	Min.	Тур.	Max.	Unit	Remark
Measurement Distance	-	25	30	km	Each Channel
Temperature Accuracy	-	±3	-	°C	25 km
Temperature Resolution	-	0.1	-	°C	-
Sampling Resolution	-	0.4	-	m	-
Spatial Resolution	-	5	-	m	-
Position Accuracy	-	5	-	m	-
Measurement Time	-	3	5	min	-
Measurement Range	-20	-	120	°C	Common Fiber
Optical Channels		2		-	-

### Working Environment:

Parameter	Min.	Тур.	Max.	Unit	Remark
Working Temperature	-10	+25	+55	°C	-
Storage Temperature	-40	-	+70	°C	-
Relative Humidity	5	-	90	%	-

### Electrical Specifications:

Parameter	Min.	Тур.	Max.	Unit	Remark
Supply Voltage	+12	+12	+24	V	-
Startup Power	-	15	20	W	-
Full Load Power	-	20	25	W	-

# PRODUCT SPECIFICATION



#### • Interfaces:

Parameter		Notes	
Output	RS485	Modbus	
	RJ45	UDP/TCP	
	FC/APC	Connectors	
	USB	-	
Fiber Type	Single-mode	-	
Display	IPS	-	
Data storage	Internal, included	-	

### • RS485 Communication Protocol:

Parameter	Value	Notes
Baud Rate	9600	bit/s
Data Bits	8	bit
Stop Bits	1	bit
Parity	None	-

## Optical Interface Labels:

Optical Interface	Label Text	Label Format
Optical Fiber	Output	
Electrical Interface	Power	
	RJ45	Label
	RS485	





\*\*The product specifications and descriptions in this document are subject to change without notice and are not binding.