Rack Mount HC -DTS 800-U-DL

Product name	Distributed optical fiber thermometry system	
Technical parameters		
Project	**Unit**	**Content**
Measure the distance	Km	≤ 16 (10km/channel recommended for spatial resolution 1m, 5km/channel recommended for spatial resolution 0.5m, 20km/channel recommended for spatial resolution 3m)
Measurement channel	Channel	1 ~ 16 (customizable)
Measure the time	s	2s/km@0.5m spatial resolution, 1s/km @ 1m spatial resolution
Alarm threshold	℃	Users can make their own choices
Alarm partition	A	800/single channel
Maximum number of alarms	A	1000
Alarm record	Bar	≤1000
Alarm type	/	High temperature threshold, positive temperature rise threshold, regional temperature difference threshold, user-defined warning, etc.
Type of fault	/	Main engine failure and fiber breakage
Size of equipment	mm	482 × 420 × 133 (standard 3 U, W × D × H)
Applicable ambient temperature	℃	Thermometry host: -25 ~ + 55 Long-term temperature of optical cable: -20 ~ 75 Short-term temperature of optical cable: -40 ~ 150 (after 2 hours of installation, under stress-free conditions)
Thermometry range	℃	-200 ~ 300 (the measurement temperature range is determined by the structure of the optical cable)
Temperature resolution	℃	≤0.1
Spatial resolution ①	m	0.5, 1, 3 (customizable)
Temperature accuracy ②	℃	≤ ± 1 @ 1m spatial resolution, ≤ ± 1.5@0.5m spatial resolution
Positioning accuracy	m	≤±1@10KM；≤±3@20KM；
Sampling interval	m	≤±0.4@10KM；≤±1@20KM；
Relay output	Road	20 (expandable to 240 outputs)

Power supply	V	DC24、AC220
Power	W	≤35
Operating System	/	Windows, Linux (customizable)
Support agreement	/	Modbus TCP, private TCP/IP (customizable)
Storage space	G	1024 (standard mechanical hard drive), 128 (SSD customizable)
Host interface	A	RJ45*1、RS232*1、USB*2、VGA*1、HDMI*1
Fiber type	/	MM：62.5/125μm、50/125μm SM: 9/125 μm (customizable)
Connector type	/	FC/APC, E2000 (customizable)
Storage temperature	℃	-40~+80
Operating humidity	/	(0-95%) R. H. Non-condensable
Host life	Year	10
Degree of protection	/	Host IP30, optical cable IP68
Weight of the main engine	Kg	≤8

Note ①: The spatial resolution of the host is 2.5KM at the typical temperature of 25 ℃, measured by the method of 10% -90% of the rising edge of the temperature curve.

Note ②: When the host is at a typical temperature of 25 ℃, the temperature range of 2.5KM optical cable is 20 ℃ -100 ℃.

HC- DTS 800 product structure diagram