

OEM Fiber Optic Temperature Sensor for Industrial Applications

Miniature, Low cost, and Reliable



OSENSA's FTX-020-OEM-HT module is the world's smallest form-factor fiber optic temperature sensor module that easily integrates into OEM applications. It mounts directly to a PCB with a 5-pin header and talks to a microcontroller using either Serial Modbus or SPI protocols.

Supported Probe Styles include red LED versions of PRB-G20, PRB-200, PRB-230, PRB-G40, PRB-400, PRB-910, PRB-110, PRB 100 and PRB-GB3

Module Specifications

	FTX-020-OEM-HT				
Measurement Range	-40 to +200°C				
Standard Operating Temperature	-20 to +65°C				
*Extended Operating Temperature when Max Probe Temp < 150°C	-20 to +85°C				
Repeatability from -40 to 150°C	± 0.15°C				
Typical Measurement Noise	Std Dev < 0.03°C				
Supported Fiber Core Sizes	200 to 1000μm				
Light Source	Red				
Optical Interface	ST Connector				
Digital Interface	Serial Modbus or SPI				
Product Compliance	RoHS (€				
Note: *Continuous operation above 65°C may reduce product life					

Mechanical Layout

MOUNTING DETAILS MODULE DIMENSIONS 222 1.6 5.5 8.4 9.69 M2 NUT M2 NUT

11.3 • 2xØ24THRU FOR M2 FASTENER 5xØ0.7THRU 127 TYP

PCB LAYOUT

Electrical Interface

2100ti Todi Tittoridoo		acc		
Pin	Modbus	SPI	Description	Notes
1	GND	GND	Ground connection. No reverse polarity protection	-
2	MS	CS	Module/Chip select. Hold high (3.3V) to ignore coms	3.5V max
3	+5V	+5V	Regulated 5VDC power, 100mW continuous, 350mW peak	6.0V max
4	RX	MISO	UART Receive / Master Input (3.3V)	3.5V max
5	TX	SCLK	UART Transmit / Serial Clock Line (3.3V)	3.5V max

Toll Free: 1-888-732-0016

DIMENSIONS IN MILLIMETERS

TECHNICAL SUPPORT

OSENSA Innovations offers onsite support, commissioning, and training for all of its products. For immediate assistance with any technical issue, please contact support@osensa.com or call 1-888-732-0016.

WARRANTY INFORMATION

OSENSA Innovations stands behind its products and services. All fiber optic temperature probes and signal conditioners ship with a full one year repair or replacement warranty. You may also purchase

an extended five year warranty. Some conditions apply.

CUSTOM OFM SOLUTIONS

OSENSA offers cost-effective design and consulting services at discounted rates for high-volume OEM customers. Let the engineering team at OSENSA Innovations help you rapidly develop custom probes for your process control application.

OSENSA's team has many years of experience designing fiber optic temperature probes for various industrial environments.

FURTHER INFORMATION

For more information on any of our products or services please visit our website: www.osensa.com or email: info@osensa.com.



8672 Commerce Court International: 1-604-259-7177 Burnaby, BC, Canada, V5A 4N7 Email: info@osensa.com

Specifications subject to change without notice.

www.osensa.com