

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

TECHNICAL SUPPORT

OSENSA Innovations offers on-site 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 OEM 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

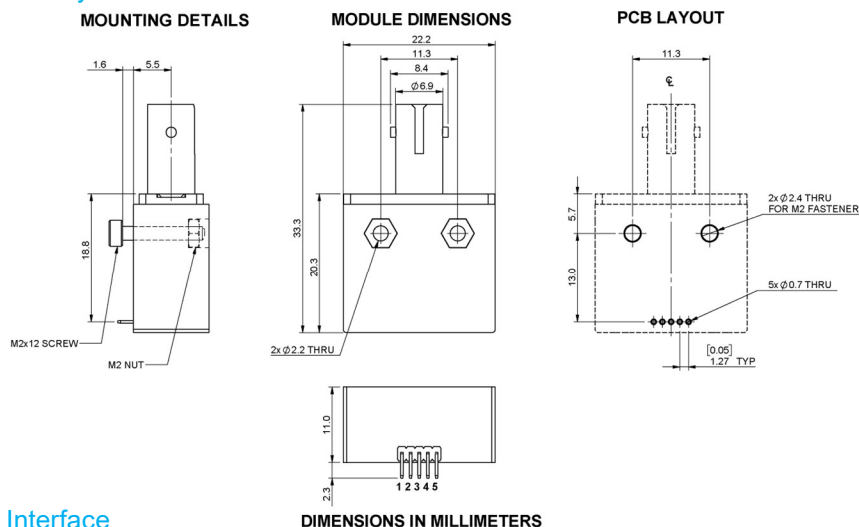
For more information on any of our products or services please visit our website: www.osensa.com or email: info@osensa.com.



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



Electrical Interface

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