

# FTX-300-LUX+ Fiber Optic Temperature Transmitter

## MRI, Microwave, Industrial and Research Temperature Measurement

### 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](mailto: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](http://www.osensa.com) or email: [info@osensa.com](mailto:info@osensa.com).



FTX-300-LUX+ Temperature Transmitter

### Scalable High-Performance Fiber Optic Temperature Sensing

The FTX-300-LUX+ fiber optic signal conditioner offers exceptional value combined with industry leading speed and accuracy. Whether your application requires one, two, or three sensing channels, the FTX-300-LUX+ transmitter is ideally suited for demanding research applications in MRI, microwave, and high electro-magnetic field environments. It can read optical sensors with tip diameters as small as 350 microns over distances up to 50 meters. It connects quickly to your personal computer with a standard USB cable to provide real-time temperature trending and data logging with the optional OSENSAVIEW Pro software or LabView VI. The 4-20mA analog outputs have 16 bit resolution with configurable alarms for easy connection to a PLC, temperature controller, solid state relay, or digital display. Multiple signal conditioners can be connected in series and mounted on a standard 35mm DIN rail.

## Product Specifications

Model Name	FTX-100-LUX+	FTX-200-LUX+	FTX-300-LUX+
Number of Channels	1	2	3
Analog Output	Isolated 4-20mA		
Digital Interface	USB & Isolated RS-485		
Measurement Range	-70°C to +450°C		
Resolution	0.01°C		
Measurement Accuracy*	±0.05°C from 0 to 40°C Ambient		
Update rate	30-90 Hz		
Comm. Protocol	Modbus RTU, Half Duplex		
Status Indication	3 Color Flashing and Solid LEDs		
Operating Humidity	0 to 90% RH (Non-Condensing)		
Operating Environment	-40°C to +65°C		
Power	12-24 VDC (2.5W max)		
Dimensions	114mm Tall x 22.5mm Wide x 102mm Long		
Mounting	35mm DIN Rail		
Configuration Software	OSENSAVIEW or OSENSAVIEW Pro		
Product Compliance			

\* Overall system accuracy depends on fiber optic probe style and calibration. With individual probe calibration it is possible to achieve system accuracies of ±0.10°C. Typically, probes are sold with uncalibrated interchangeable accuracies of ±0.5°C or ±1.0°C.

# FTX-300-LUX+HT Fiber Optic Temperature Transmitter

## High Temperature Microwave and Inductive Temperature Measurement


### Scalable High-Performance Fiber Optic Temperature Sensing

Whether your application requires one, two, or three sensing channels, the FTX-300-LUX+HT transmitter is ideally suited for high temperature measurement applications offering exceptional performance where traditional thermocouples fail. It reads OSENSA's proprietary high temperature fiber optic sensors targeting applications between 350°C and 800°C. It supports Modbus communications over an isolated RS-485 connection and also connects to a personal computer with a standard USB cable to provide real-time temperature trending and data logging with the optional OSENSAVIEW Pro software. Also supported are Python, Matlab and LabView libraries. The 4-20mA analog outputs have 16 bit resolution with configurable alarms for easy connection to a PLC or temperature controller. Multiple signal conditioners can be connected in series and mounted on a standard 35mm DIN rail.



FTX-300-LUX+HT Temperature Transmitter

## Product Specifications

Model Name	FTX-100-LUX+HT	FTX-200-LUX+HT	FTX-300-LUX+HT
Number of Channels	1	2	3
Analog Output	Isolated 4-20mA		
Digital Interface	USB & Isolated RS-485		
Measurement Range	0°C to +800°C		
Resolution	0.1°C		
Measurement Accuracy*	±0.5°C from 350°C to 800°C		
Update rate	30 Hz		
Comm. Protocol	Modbus RTU, Half Duplex		
Status Indication	3 Color Flashing and Solid LEDs		
Operating Humidity	0 to 90% RH (Non-Condensing)		
Operating Environment	-40°C to +65°C		
Power	12-24 VDC (2.5W max)		
Dimensions	114mm Tall x 22.5mm Wide x 102mm Long		
Mounting	35mm DIN Rail		
Configuration Software	OSENSAVIEW or OSENSAVIEW Pro		
Product Compliance			

\* Overall system accuracy depends on fiber optic probe style and calibration. With individual probe calibration it is possible to achieve system accuracies of ±0.5°C, but accuracy is less at temperatures below 350°C and may only be ±1.0°C near room temperature.

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