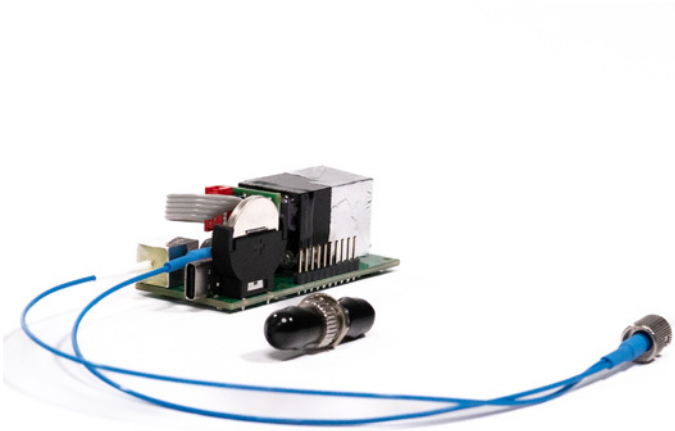
FOTEMP MN30

for embedded instrument applications



The FOTEMP MN30, is a sleek, minimalist solution for customer projects.

Our advanced fiber optic sensors excel in measuring temperatures in challenging environments—such as microwaves, high frequencies, high voltages, and magnetic fields—where traditional metallic sensors cannot be used.

The FOTEMP MN30 combines a powerful light source, an optical analyzer, and electronics. With multiple interfaces, including RS232, RS485, and USB, it supports real-time data acquisition through ASCII or Modbus protocols.

Data can be logged continuously and time-stamped on an SD card for easy access. The device requires only one connection, and it has versatile power options—external supply or USB.

Additionally, the “FOTEMP Assistant” software is available for directly controlling and monitoring the device, and the communication protocol is provided for software development.

Why buy?

- Small footprint
- Easy OEM integration
- USB powering possible

Application

- EMI, RFI and microwave environments
- High voltage environments
- Process monitoring
- Medical applications (MRT)

TECHNICAL FEATURES AT A GLANCE

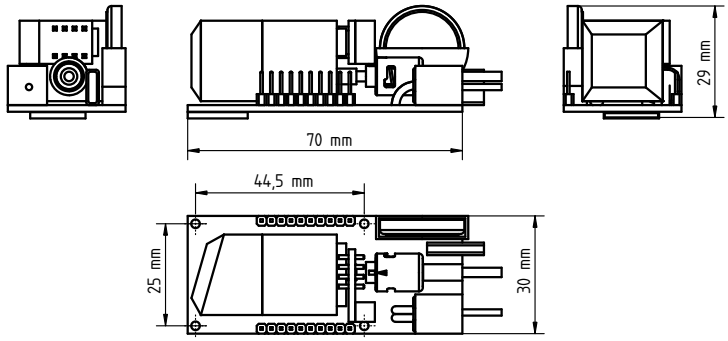
FOTEMP MN30	
Channel	1 or 2
Display	Not available
Analog output	Not available
Data logging	Continuous, and timed logging on microSD
Communication protocols	ASCII, Modbus RTU
Interfaces	TTL, RS232, RS485, USB
Relay	NO
Power supply	USB-Powered (Standard) or 9-24 VDC

Environment	
Operating temperature	-20°C to 60°C
Storage temperature	-20°C to 70°C
Probes	Compatible with all COMEM fiber optic temperature probes
Fiber optic core	200 um
Connector type	ST
Mounting options	None

Measurement	
Measurement range	-200°C to 300°C
Measuring Time	< 250 ms per Channel
Accuracy	0.2 K
Resolution	0.1 K

DIMENSIONS

FOTEMP MN30



Width (mm)	Height (mm)	Depth (mm)	Weight (Kg)
30	29	70	0.2

www.comem.com

The data and illustrations are not binding. We reserve the right to modify the contents of this document without prior notice following the technical and product developments.
Copyright 2025 COMEM. All rights reserved

Leaflet 06-2025

MICRONOR SENSORS INC.
For North American Sales and Service

2065 Sperry Ave, Suite B
Ventura, CA 93003 USA
+1-805-389-6600
sales@micronor.com
www.micronor.com

COMEM Optocon GmbH

Washingtonstraße 16/16a D-01139
Dresden Germany
Tel +49 (0) 351 8435990

FIBER OPTIC THERMOMETER

FOTEMP-MN30

Ordering Info

CE

MADE IN GERMANY

STOCKED IN
VENTURA, CA USA

F O T E M P - M N 3 0 - 1 - P 0 - B

No. of Channels

1	1 Channel
2	2 Channels

Interface/Power Options

P0	Power=USB-C, Interfaces/Procols= USB-C/ASCII + TTL-UART/ASCII + RS232/ASCII + RS485/ModbusRTU,
P1	Power=External 9-24VDC, Interfaces/Protocols= USB-C/ASCII + TTL-UART/ASCII + RS232/ASCII + RS485/ModbusRTU

Calibration Options

A1	-20°C to +150°C
A2	-40°C to +200°C
B	-40°C to +300°C
C	-200°C to +300°C

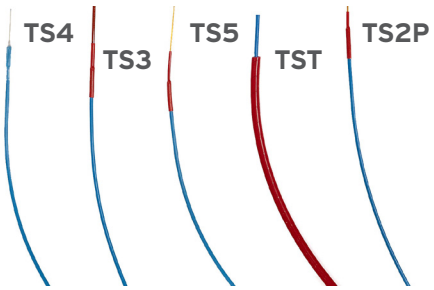
Standard stock MN30 models:

FOTEMP-MN30-1-P0-B	1 Channel, USB-C (Power & Communications) B Cal= -40°C to +300°C

Standard stock TS Temperature Probes:

TS2p-02	Smallest Form Factor, Bare Crystal, L=2m
TS3-15MM-02	General Purpose, Rigid Tip, L1=15mm, L=2m
TS3-15MM-05	General Purpose, Rigid Tip, L1=15mm, L=5m
TS4-02	For Harsh Chemicals and Radiation, L=2m
TS4-05	For Harsh Chemicals and Radiation, L=6m
TS5-20MM-02	For Medical, Small Profile, L1=20mm, L=2m
TS5-20MM-06	For Medical, Small Profile, L1=20mm, L=6m
TS5-50MM-02	For Medical, Small Profile, L1=50mm, L=2m
TS5-50MM-06	For Medical, Small Profile, L1=50mm, L=6m
TST-02	For Oil-Filled Transformers, L=2m

Custom lengths (L and L1) available upon request.



micronor sensors

MICRONOR SENSORS, INC.
2065 Sperry Ave, Suite B, Ventura, CA, 93003, USA
+1-805-389-6600 sales@micronor.com
www.micronor.com