

## FOTEMP C20

**for environments where measurement  
with metal temperature sensors is impossible**



The FOTEMP C20 is designed for environments where traditional metal temperature sensors (such as RTDs, thermocouples, and capillary sensors) cannot be used, including microwave, high-frequency, high-voltage, and high-magnetic-field settings, as well as aggressive environments.

It measures temperature based on changes in the optical properties of a gallium arsenide crystal (GaAs).

This compact device includes a light source, an optical analyzer, and the necessary electronics with an interface and display.

It features a 2.8-inch color display that shows current measurement values and monitors sensor integrity.

The FOTEMP C20 provides standard analog outputs (one per channel) and a serial communication port for real-time data acquisition. 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?

#### Serviceability:

- Easy installation and maintenance
- Long term reliability
- High-quality fiber optic sensors & devices

#### Remote monitoring and control:

- Remote control signals through standard communication protocols

#### Application:

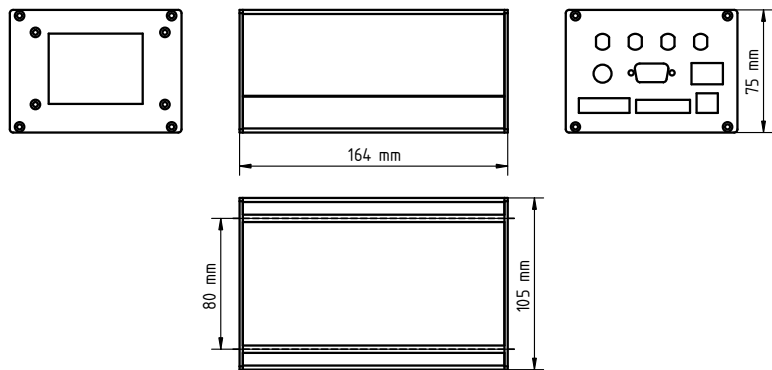
- EMI, RFI, and microwave environments
- High voltage environments
- Process monitoring
- Medical applications (MRT)

TECHNICAL FEATURES AT A GLANCE

FOTEMP C20	
Channel	1, 2, 4
Display	2,8 LCD
Analog output	0 - 10 V or 4 - 20 mA
Data logging	Not available
Communication protocols	ASCII, Modbus
Interfaces	RS485, USB
Relay	4 relays (optional)
Power supply	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	DIN rail mounting bracket, Pressed nuts, Threaded bolts
Measurement	
Measurement range	-200°C to 300°C
Measuring Time	< 250 ms per Channel
Accuracy	0.2 K
Resolution	0.1 K

DIMENSIONS

FOTEMP C20



Width (mm)	Height (mm)	Depth (mm)	Weight (Kg)
105	75	164	0.5

www.comem.com

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Leaflet 06-2025

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# FIBER OPTIC THERMOMETER

## FOTEMP-C20

### Ordering Info

**F O T E M P - C 2 0 - 4 - V - - B**

#### No. of Channels

- 1** 1 Channel
- 2** 2 Channels
- 4** 4 Channels

#### Analog Output Options

- M** 4-20mA
- V** 0-10V

#### Relay Option

- Blank** None
- R** Relays

#### 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 FOTEMP-C20 Models:

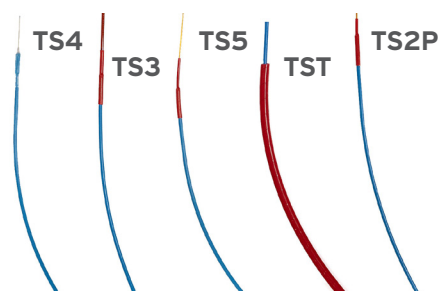
**FOTEMP-C20-4-V-B** 4 Channels, USB+RS485, 0-10V, No Relays, Calibrated -40°C to +300°C

**FOTEMP-C20-4-V-C** 4 Channels, USB+RS485, 0-10V, No Relays, Calibrated -200°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.



MADE IN GERMANY

STOCKED IN  
VENTURA, CA USA

**micronor  
sensors**

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