

## 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

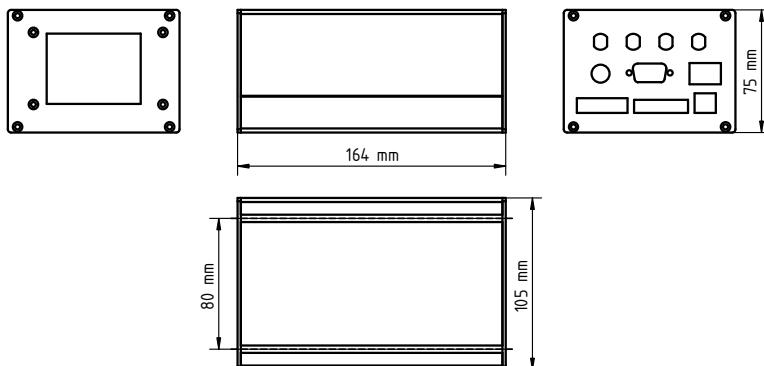
Operating temperature	-20°C to 60°C
Storage temperature	-20°C to 70°C
Probes	Compatible with all COMEM fiber optic temperature probes
Fiber optic core	200 um
Connector type	ST
Mounting options	DIN rail mounting bracket, Pressed nuts, Threaded bolts

## 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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# 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

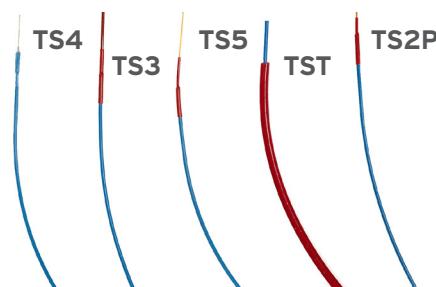
Standard stock FOTEMP-C20 Models:

**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:

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



Custom lengths (L and L1) available upon request.

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sensors

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