

TECHNICAL GUIDE

# Fiber optic devices





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# Application

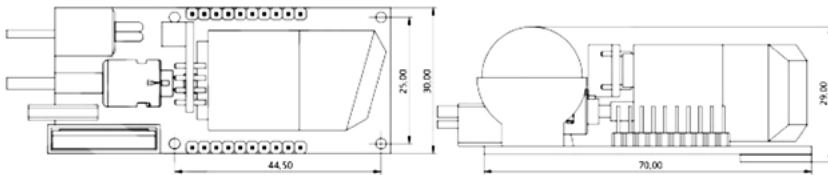
Application										
Device type	For embedded instrument applications	EMI, RFI and microwave environments	High voltage environments	Harsh and hazardous environments	Nuclear environments	Aerospace applications	Process monitoring	Medical applications	Oil-filled transformers	MRI and other magnetic field applications
FOTEMP MN30	●	●	-	-	-	●	●	●	-	●
FOTEMP HD20	-	●	●	●	●	-	●	-	-	●
FOTEMP MS10	-	●	●	-	-	-	●	-	-	●
FOTEMP C15	●	●	●	●	-	●	●	●	●	●
FOTEMP C20	-	●	●	-	-	-	●	●	-	●
FOTEMP T20	-	●	●	●	●	●	●	-	●	●
FOTEMP T30	-	●	●	●	●	-	●	-	●	●

# Technical data

Device type	FOTEMP MN30	FOTEMP HD20	FOTEMP MS10	FOTEMP C15	FOTEMP C20	FOTEMP T20	FOTEMP T30
<b>Number of channels</b>	1	1, 2	1, 2, 4 per module	1, 2, 4	1, 2, 4	2 to 16	2 to 16
<b>Modules</b>	-	-	10x7TE or 5x14TE	-	-	-	4x up to 4 channel
<b>Measuring range</b>	-200°C to 300 °C	-200°C to 300 °C	-200°C to 300 °C	-200°C to 300 °C	-200°C to 300°C	-200°C to 300 °C	-200°C to 300 °C
<b>Accuracy</b>	± 0.2 K	± 0.2 K	± 0.2 K	± 0.2 K	± 0.2 K	± 1 K	± 1 K
<b>Sample rate channel</b>	250 ms	250 ms	250 ms	250 ms	250 ms	250 ms	250 ms
<b>Display</b>	-	3.5" LCD	0.96" on 7TE or 14TE OLED	-	2,8" LCD	4.3" LCD	7" LCD
<b>Analog output</b>	-	-	0-10 V or 4-20 mA	0-10 V or 4-20 mA	0 - 10 V or 4 - 20 mA	0 - 10 V or 4 - 20 mA	0 - 10 V or 4 - 20 mA
<b>Relay</b>	-	-	1 per channel	1 per channel	1 per channel	2 programmable, 1 sensor fault, 1 watchdog	16 free programmable relays
<b>Interface</b>	TTL, RS232, RS485, USB	USB, Reference sensor	RS232, USB	USB, RS232 (standard) or RS485(option)	USB and RS232 (standard) or RS485(option)	RS232, RS485, USB, Ethernet	RS232 (DEBUG), RS485, Ethernet
<b>Additional protocols</b>	Modbus	-	-	Modbus	Modbus	Modbus	Modbus, DNP3.0, IEC61850, IEC 60870-104
<b>Data logging</b>	Continuous or timed logging on microSD	Continuous or timed temperature logging, spectrum snapshots	-	-	-	Continuous or timed logging on microSD	-
<b>Internal data logging</b>	Yes	Yes	-	-	-	Yes	Yes
<b>Power supply</b>	USB-Powered (Standard) 9-24 VDC	9 VDC	100 - 240 VAC / 50 - 60 Hz	12 VDC	12 VDC	24 VDC	24 VDC
<b>Mounting / Housing options</b>	Mounting holes	-	19" rack mount chassis, 84TE or 42TE cabinet	DIN rail mounting bracket, Pressed nuts, Threaded bolts	DIN rail mounting bracket, Pressed nuts, Threaded bolts	DIN rail mounting bracket	DIN rail or standard mounting brackets
<b>Connector type</b>	ST	ST	ST	ST	ST	ST	ST

# Dimensions

## FOTEMP MN30



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

## FOTEMP HD20



Width (mm)	Height (mm)	Depth (mm)	Weight (Kg)
20	112	40	0.6

**FOTEMP MS10**

**Housing variants**



<b>Name</b>	19" Cabinet mounting housing	84TE or 42TE Desktop housing
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**Module variants**



<b>Name</b>	MS-14TE	MS7TE	MS7TE-S
<b>Size</b>	14TE	7TE	7TE
<b>Channel</b>	1 - 4	1 - 4	1
<b>Display</b>	1,7" OLED	-	0,96" OLED
<b>Analog</b>	0 - 10 V or 4 - 20 mA per Channel	0 - 10 V or 4 - 20 mA per Channel	0 - 10 V or 4 - 20 mA
<b>Relay</b>	1x Relay per Channel	1x Relay per Channel	-

Version	Width (mm)	Height (mm)	Depth (mm)	Weight (Kg)
Cabinet mounting housing	488	133	247	0.8
B4TE Desktop housing	538	158	305	
42TE Desktop housing	323	158	305	

# Dimensions

## FOTEMP C15



Width (mm)	Height (mm)	Depth (mm)	Weight (Kg)
42	160	105	0.5

## FOTEMP C20



Width (mm)	Height (mm)	Depth (mm)	Weight (Kg)
160	105	75	0.5



**FOTEMP T20**



Width (mm)	Height (mm)	Depth (mm)	Weight (Kg)
209	203	109	2.0

**FOTEMP T30**



Width (mm)	Height (mm)	Depth (mm)	Weight (Kg)
238	190	155	2.0

# Order sheet

Date	
Rev.	
Customer reference	

**Device type**

FOTEMP MN30	
FOTEMP HD20	
FOTEMP MS10	
FOTEMP C15	
FOTEMP C20	
FOTEMP T20	
FOTEMP T30	

**Channels (see page 5)**

1	
2	
4	
8	
12	
16	
1 - 40 (please specify)	

**Analog output (see page 5)**

0 - 10V (Standard)	
4 - 20 mA (Option)	

**Accuracy calibration (1 sigma)**

0.2 K (Standard)	
1 K (Option)	

**Communication**

USB + RS232 (Standard)	
USB + RS485/Modbus (Option)	

**Temperature calibration**

-20°C to +150°C (Basic)	
-40°C to +200°C (Standard)	
-40°C to +300°C (High temperature)	
-200°C to +300°C (Extended)	
Customer special (please specify)	



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