

Real-time direct hot spot temperature monitoring

A high-precise fiber optic technology
for the entire transformer lifecycle



Whether you are managing asset health remotely or on-site, our **fiber optic temperature monitoring** system delivers high-precision, real-time data on direct winding hot spot temperature.

System highlights at a glance:

- Exact direct winding temperature measurement
- Fast, repeatable, and reproducible measurements
- Hot-spot thermal modeling
- Turnkey & customizable solution
- Immune to electromagnetic, and radio-frequency interferences
- Fully immune to microwave radiation

Why buy?

Transformer safety:

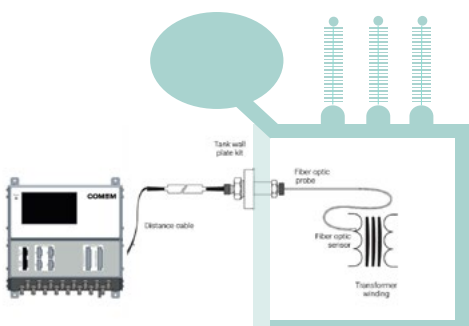
- Precise hot-spot monitoring
- Predictive maintenance approach
- Premature failures prevention
- Effective loading management
- Transformer lifecycle extension

Serviceability:




- Easy installation and easy usage
- Long term reliability
- Real-time readings
- High accuracy of $\pm 1K$
- Rapid sampling rate per channel



Remote monitoring and control:

- Remote control through standard communication protocols
- Compatible with MeDICA or third-party monitoring systems




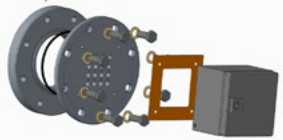


Our solution for oil-filled transformers:

Device type	FOTEMP HD20	FOTEMP T20	FOTEMP T30
			
Number of channels	1 or 2	2 to 16	2 to 16
Modules	-	-	4x up to 4 channels
Measuring range	-200°C to +300°C	-200°C to +300°C	-200°C to +300°C
Accuracy	0.2 K	± 1.0 K	± 1.0 K
Sample rate channel	250 ms	250 ms	250 ms
Display	3.5" LCD	4.3" LCD	7" LCD
Analog output	-	0 - 10 V or 4 - 20 mA	0 - 10 V or 4 - 20 mA
Relay	-	2 programmable, 1 sensor fault, 1 watchdog	16 free programmable relays
Interface	USB, Reference sensor	RS485, USB, Ethernet	RS485, Ethernet
Additional protocol	-	Modbus	Modbus DNP3.0, IEC61850, IEC60870-104
Data Logging	Continuous or timed logging, Spectrum snapshots	Continuous or timed logging on microSD	-
Internal Data Logging	-	Yes, programming via Modbus required	Yes
Power Supply	12 VDC	24 VDC	24 VDC
Mounting/housing options	-	DIN rail mounting bracket	DIN rail or standard mounting bracket
Connector type	ST	ST	ST

Sensor type	TST	Disk-spacer
		
Long-term temperature range	-200°C to +260°C	-
Short-term temperature range	-260°C to 300°C	-260°C to 300°C
Accuracy	+/- 0.2 K	-
Thermal response	19°C/s	-
Probe dimension	D1: 1,75 mm D2: 1,2 mm D3: 1,3 mm	-
Other dimensions	D1: 10 mm D2: 70 mm D3: 1 - 20 m	Consult drawing
Cable coating	PTFE	-
Connector type	ST	-

Accessories

Tank wall plate	Feedthroughs	Distance cable
		
Tank wall kit incl. J-Box		
		



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