# **iTEMP TMT86** Ethernet-APL: Smart, fast, digital

The iTEMP TMT86 is a reliable, intelligent and future proof dualchannel Ethernet-APL PROFINET temperature head transmitter, suitable for use in hazardous areas.

The iTEMP TMT86 temperature transmitter is designed for integration in all standard thermometers. The focus industry for this transmitter is the chemical industry. Due to its universal usage the transmitter can also be integrated in hygienic thermometers for applications in the Food & Beverage or Life Sciences industries.

Beneficial diagnostic functions like corrosion monitoring of the sensor wires help to improve the plant up-time. The embedded webserver and the up-to-date FDI package simplify the device configuration and integration.



#### Your benefits

Value	Benefit	Feature
Process safety and plant availability	Digital communication down to the field level, even in explosion hazardous areas	<ul> <li>Ethernet-APL with PROFINET</li> <li>Simple Ex planning and validation by 2-WISE (2-wire Intrinsically Safe Ethernet)</li> </ul>
	Long-term stability, accurate and precise temperature measurement	<ul><li>Long-term stability of the electronics</li><li>Highly accurate sensor input</li></ul>
	Robust technology which ensures high availability of the process plant	<ul> <li>Condensed status according to NE107</li> <li>PROFINET PA Profile 4</li> <li>Advanced diagnostic functions like corrosion monitoring</li> </ul>
Functional simplicity	Save time and effort on commissioning, configuration and maintenance	<ul> <li>Easy access to the device in the network - Web server</li> <li>Local device interface for fast maintenance access - CDI interface</li> <li>Easy and state-of-the-art device integration - FDI package</li> </ul>
	Clear process information in the field	<ul><li>Excellent readability of plug-in display - TID10</li><li>Warning / alarm indication</li></ul>

### Applications

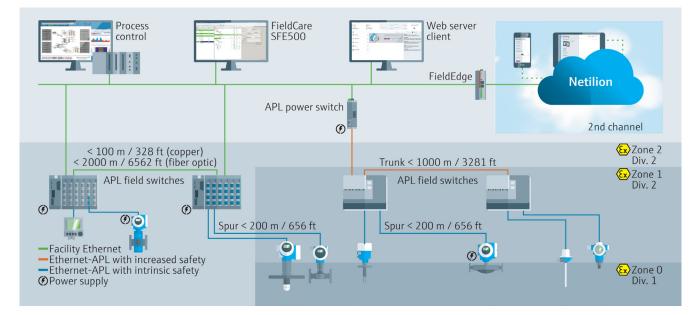
- Universal temperature transmitter with PROFINET communication
- Installation in terminal head form B and field housing
- International certifications and approvals: Intrinsically safe and explosion-proof



## Features and specifications

Sensor input:	2x RTD, TC, Ohm and mV
Operation and commissioning:	FDI package via PROFINET, DTM via CDI or Webserver, GSD
Output:	PROFINET
Power supply:	Ethernet-APL, 2-wire Ethernet SPE based on 10BASE-T1L (special SPE switch)
Approvals:	2-Wire Intrinsically Safe Ethernet (2-WISE) ATEX, IECEx, NEPSI, cCSAus, UKCA, INMETRO, KC

## System integration and architecture



## Related offering

Component	Feature
Local display TID10	<ul> <li>Clear information at the measuring point and process</li> <li>Inverse display in case of diagnostic messages</li> <li>Permanent process monitoring or temporary application for service and maintenance work</li> <li>Device configuration via DIP-switches</li> </ul>
Thermometer ModuLine iTHERM High degree of flexibility, modular design	

