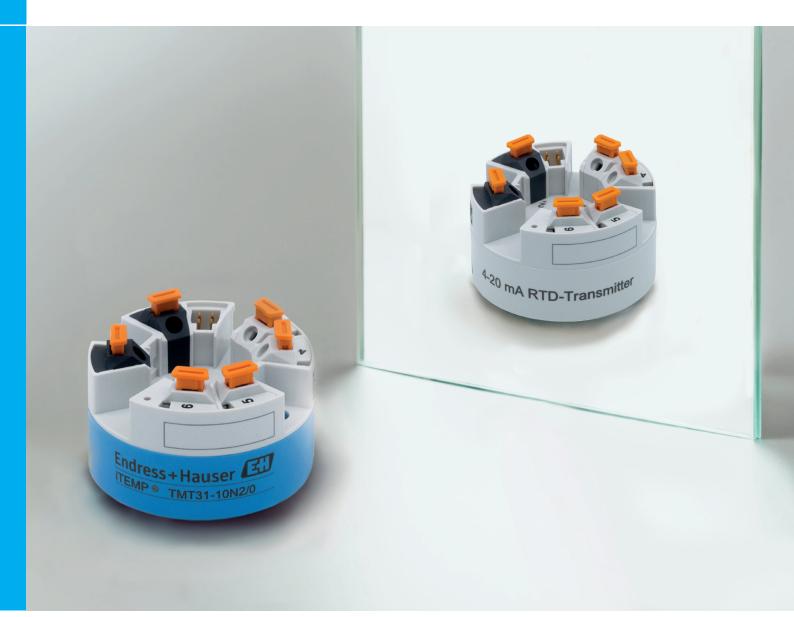
Services

Generic, dual label and private label products

Generating additional business for OEMs, industry and commerce





Endress+Hauser – Your reliable business partner

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To learn more about Endress+Hauser, visit: www.endress.com

> Information on the ISO certification: Cyber security certification for Endress+Hauser





Endress+Hauser is a global leader in measurement instrumentation, services and solutions for industrial process engineering

With dedicated sales centers and a strong network of partners, Endress+Hauser guarantees competent support worldwide. Our production centers in twelve countries meet your needs and requirements quickly and effectively. The group is managed and coordinated by a holding company in Reinach, Switzerland. As a successful family-owned business, Endress+Hauser is set to remain independent and self-reliant.

Endress+Hauser provides sensors, instruments, systems and services for level, flow, pressure and temperature measurement as well as analytics and data acquisition. The company supports you with automation engineering, logistics and IT services and solutions. Our products set standards in quality and technology.

The company works closely with the chemical, petrochemical, food & beverage, oil & gas, water & wastewater, power & energy, life science, mining, minerals and metals, renewable energy, pulp & paper and shipbuilding industries. Endress+Hauser helps customers to optimize their processes in terms of reliability, safety, economic efficiency and environmental impact.

Competence center for temperature measurement, temperature engineered solutions and system products

Endress+Hauser Temperature+System Products is one of the leading producers of temperature measurement, temperature engineered solutions and system products worldwide.

The company employs more than 700 associates worldwide. 400 of which are working in our headquarters Nesselwang (Germany), where our products are developed and produced.

Associated product centers in Pessano (Italy), Greenwood (USA), Suzhou (China) and Aurangabad (India) guarantee customer proximity with products and services.



Your market presence - Your advantage

Complete your product offering to expand your business.

Everything you need from a single source.

Your customized version from Endress+Hauser. We support you with our comprehensive range of products available in a generic design or featuring your individual brand name.

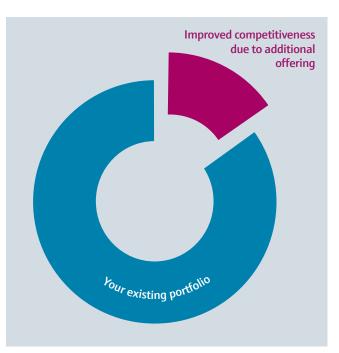
The advantage of our products lies in their functionality and versatility for every customer group, whether OEM, reseller or end user. With our high-quality sensors, transmitters, display units, power supply units, barriers and data managers, we help you achieve added value across the entire measuring chain!

A long-term partnership

From concept to operational support, Endress+Hauser supports you throughout the whole lifecycle of your projects. For us, working with you means more than just supplying you with high-quality products.

Our common goal is the development of a reliable longterm and mutually beneficial relationship through consulting, support and exchange of know-how.

Your benefits

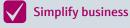


Increase turnover

- Open up new markets, increase market share due to an extended offering
- Increase customer loyalty by strengthening your brand, utilizing follow-up and spare part business
- Offer innovative, state-of-the-art and internationally competitive products



- Save costs of developing and managing your own products
- Pay only for the services and level of change required



Utilize a complete package - the product, software, approvals and services are customized according to your needs.

Your partner Endress+Hauser

High-quality products from a reliable business partner.





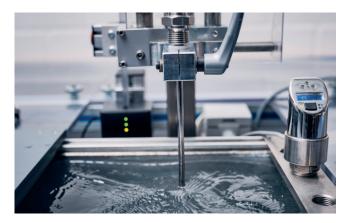
Quality "Made in Germany"

With over 100 years of experience in the field of industrial measurement technology, Endress+Hauser Temperature+System Products develops and produces reliable products in the production center in Nesselwang.

We always attach the greatest importance to quality, customer satisfaction and continuous improvement, right from the start. Our numerous quality awards and ISO 9001 quality management system bear testimony to this.

In the manufacturing process, we attach great importance to:

- Using the latest manufacturing and logistics technologies
- Reliable test and inspection systems
- Ensuring highest product quality
- Delivery of tested assemblies and products
- Fast delivery times from order receipt to shipment
- Certified products for worldwide use
- Traceability along the entire production process



Innovative technologies, marketable products

Benefit from our decades of experience in the development and production of devices and modules for industrial process measurement technology.

Profit from robust, state-of-the-art products, serving a wide range of your customer applications.

Generic, dual label or private label products

Simply neutral or tailored to your needs

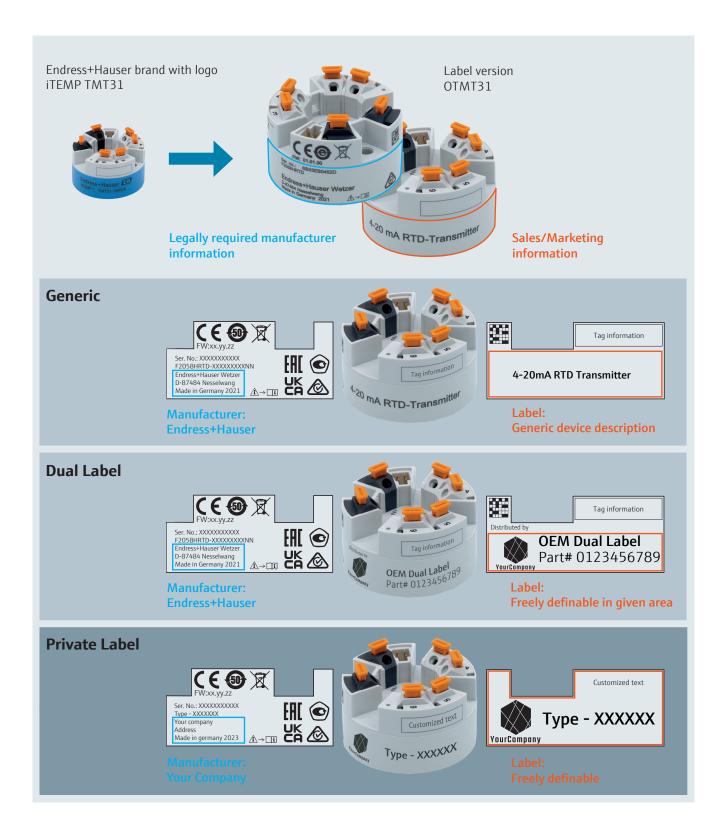
Generic products in a standardized design are the smart alternative to developing your own products and marketing other companies' brands. With generic, dual label or private label products you offer your customers everything they need without having to manufacture and stock everything yourself. Thanks to three different levels of labeling available, we offer highest flexibility for your business!

	Generic	Dual Label	Private Label	
Availability	Immediately	At short notice	Depending on the scope of change	
Nameplate	Generic content	Additional customer- specific content	Customer-specific*	
Color housing	Light gray	Standard: light gray RAL 7035, customer-specific		
Color design elements	Light gray RAL 7035 or steel blue RAL 5011 (operating fields), signal white (texts and graphics)		Customer-specific*	
Approvals	Endress	+Hauser	Approvals transcription	
Device certificates	Printed, generic cert	Electronic format possible		
System integration (e.g. HART, IO-Link,)	Endress	Customer-specific*		
Packaging label	Ger	Customer-specific*		
Product documentation	Ger	Customer-specific*		
Operating software	Generic		Customer-specific*	
Data management (Visualization Software)	Ger	Customer-specific*		
Configuration kit TXU10L	Generic		Customer-specific*	
Your benefits	Fast and easy Generic products with immediate avail- ability, utilizing the Endress+Hauser ap- provals and system integration.	Best of both worlds A generic product with Endress+Hauser approvals using a name plate containing your additional company and sales information.	Full flexibility The complete package: product, software and services are perfectly customized according to your needs.	

The three levels of labeling

An example to show the differences

The following table explains the three labeling levels and the difference to the originally Endress+Hauser branded products. For illustration purposes, we use the example of a head temperature transmitter to show you the changes to the nameplate and printed elements on the product itself.



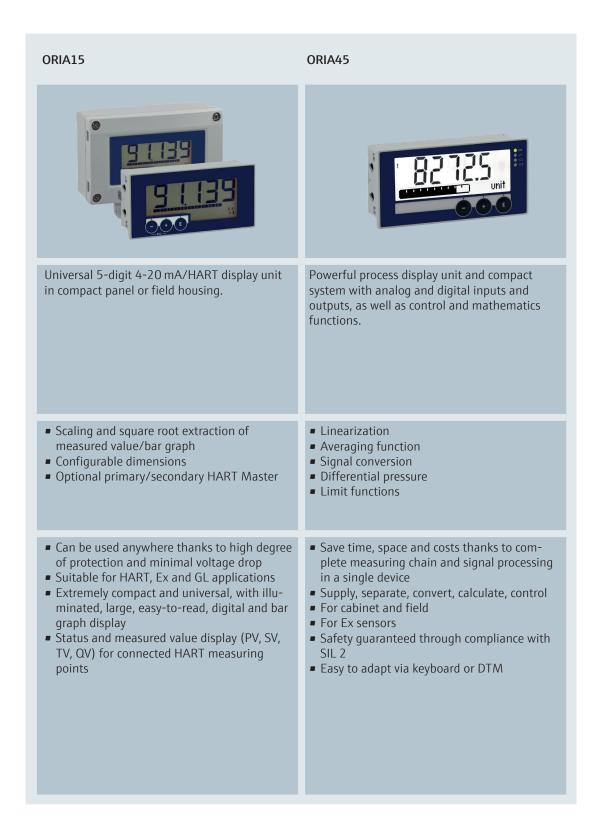
Data managers

Measure, analyze, visualize, archive, monitor, convert and communicate - incredibly simple, simply incredible.

Model	Universal data manager ORSG35	Advanced data manager ORSG45
Design	93,8 133,0 25,1 0100 0100	
Brief description	Universal data manager with color graphic display and integrated webserver. Universal analog and digital inputs and outputs/relays. Easy to operate. Ethernet, USB, RS232/485, SD card. Modbus slave. Compact panel or desktop housing. Includes PC reporting software for data archiving and analysis.	High-performance data manager; similar to ORSG35 but with more inputs/outputs, with optional large display or stainless steel front with touchscreen and Ex px approval. Unique HART inputs and gateway functionali- ty. Ethernet/IP, Profinet, Profibus DP, Modbus Master. Tamper-proof documentation in accordance with 21CFR11.
Software/ functions	 Versatile signal analysis/display and statistics function Email alarm Mathematics function Encoded or compatible data storage in an open format 	 Similar to ORSG35, but with extra/more powerful mathematics functions, analyses, display and e-mail functions Connection for mouse, printer, keyboard Batch function, application packages, process image display and much more
Your benefits	 Good earning potential due to exceptional price-performance ratio Modular design Easy handling and fulfillment of the most diverse customer requirements Integrated webserver enables remote access to the necessary information for service providers and users Highly compatible thanks to direct connection to all conventional standard signals Modern interfaces and standard formats 	 Compared to the ORSG45, even better solution options and integration capability. Easy to configure instead of difficult to program Ideal for fast and cost-efficient completion of complex tasks Increased earning potential Smart gateway solution for system modernization and integration into modern system architectures New maintenance and service concepts Remote diagnosis, access and maintenance via HART and web server Easily extend your range to include Ex-p applications

Process display units

Accurate information on site - for field and panel.



Temperature transmitters

The complete portfolio for all requirements.

Interface /Configuration			⊗IO -Link	∂ IO -Link	Tamp
	PC/CDI (M12)	PC/CDI	IO-Link	IO-Link	Fixed settings made at factory
Model	TMT470L	OTMT31	ОТМТ36	OTMT311	OTMT127
Design			Pio-Link		
Brief description	Particularly compact transmitter assembly from TMR3x thermometer series. Available as circuit board, with M12 connector or potted. Easy to install and freely configurable.	Accurate and long-term stable RTD head transmit- ter for universal use. For non-Ex applications. Callendar-van-Dusen sensor-transmitter matching. Diagnostics information as per NAMUR standard NE43.	Digital IO-Link 1.1 head transmitter with digital switch output, compatible with optional plug-on display OTID10. Integrated peakhold and Callendar-van-Dusen sen- sor-transmitter matching. Diagnostics information as per NAMUR standard NE43.	Particularly compact transmitter with 4-20mA and IO-Link 1.1 with digital switch output. Electronics from iTHERM TM311 thermometer series. Available as circuit board with M12 connector or with stainless steel housing. Diagnostics information as per NAMUR standard NE43.	Can be used for all conventional RTD sensors. Permanently precon- figured, DIN rail version for non-Ex applications.
RTD input	Pt100	Pt100, Pt1000	Pt100, Pt1000	Pt100	Pt100, Pt500, Pt1000, Ni100, Ni500, Ni1000
TC input		-	-		
Output	4 to 20 mA	4 to 20 mA	IO-Link	IO-Link/4 to 20 mA	4 to 20 mA galvanically isolated
Your benefits	 Create added value in your thermometer production through the use of well-proven industrial assemblies Marketing of competitive 4-20mA compact thermometers 	 Market-leading, cost- efficient industry quality Easy configuration thanks to royalty-free PC software 	 Enhance your modular thermometer portfolio and transmitter offering with state of the art IO- Link devices Expand your OEM and skidbuilder business Save time and costs due to fast installation using the optional push-in terminals 	 Create added value in your thermometer production through the use of well-proven industrial assemblies Marketing of competitive IO-Link compact thermometers Variant reduction by combining IO-Link and 4-20mA electronics in one module 	 Saves time and costs, as when ordering but are performed by the set of the set

per-proof	🚯 Bluetooth	Bluetooth		PROFIJ [®] Bods i	Голялатея
Fixed settings made at factory	PC/CDI optional: Bluetooth®	HART 7, PC/CDI, optional: Bluetooth®	HART 7; PC/CDI, DTM	PROFIBUS PA; DTM	Foundation Fieldbus; DTM
OTMT188 (Head) OTMT128 (DIN-Rail)	OTMT71	OTMT72	OTMT82	OTMT84	OTMT85
	1 C	1 J			
Can be used for all conventional thermocouples. Permanently preconfigured, in head and DIN rail version for non-Ex and Ex applications. Diagnostics information as per NAMUR standard NE43.	Highly accurate, universal and fast, available in head, DIN rail and field version. With optional Bluetooth [®] and plug-in display. Unique CJC for TC measurement, as well as comprehensive diagnostic and self-monitoring functions. For non-Ex and Ex applications.	Highly accurate, universal and fast, available in head, DIN rail and field version. With optional Bluetooth® and plug-in display. Unique CJC for TC measurement, as well as comprehensive diagnostic and self-monitoring functions. For non-Ex and Ex applications.	Extremely high perfor- mance, accurate and safe due to compliance with SIL2, SC3 according to IEC 61508. 2 universal inputs. Head, DIN rail and field version. Optional plug-in display. Comprehensive diagnostic and self-moni- toring functions. For non-Ex and Ex applications.	Max. performance due to compliance with PA Profile 3.02. 2 universal inputs. Head and field version. Optional plug-in display. Comprehensive diagnostic and self-monitoring functions. Non-Ex and Ex Zones 1+2.	Exceptional due to FF H1/ ITK6.0.1. 2 universal inputs. Head and field version. Optional plug-in display. Comprehensive diagnostic and self-monitoring functions. Non-Ex and Ex Zones 1+2.
	Pt50, Pt100, Pt200, Pt500, Pt1000, Ni100, Ni120, Cu50, Cu100	Pt50, Pt100, Pt200, Pt500, Pt1000, Ni100, Ni120, Cu50, Cu100	Pt100, Pt200, Pt500, Pt1000, Ni100, Ni120, Ni1000, Cu10, Cu100 (Cu50 for OTMT82)		
B, C, D, R, S, E, J, K, L, N, T, U	A, B, C, D, E, J, K, L, N, R, S, T, U	A, B, C, D, E, J, K, L, N, R, S, T, U	I, R, B, C, D, R, S, E, J, K, L, N, T, U (additionally type A for OTMT82)		A for OTMT82)
4 to 20 mA galvanically isolated	4 to 20 mA galvanically isolated	4 to 20 mA/HART galvanically isolated	4 to 20 mA/HART galvanically isolated	PROFIBUS PA galvanically isolated	Foundation Fieldbus galvanically isolated
parameters can be specified ermanently preconfigured nply connect, switch on and cations and for resale, plications due to tamper-proof,	 Enhance your range with wireless configura- tion and measured value display via Bluetooth[®] Expand your project business due to compli- ance with the latest project specifications and international customer requirements Save time and costs due to fast commissioning, and minimize storage, logistics and production costs 	 Expand your project business due to compli- ance with the latest project specifications and international customer requirements Comprehensive integration into leading systems Save time and costs due to fast commissioning Minimize storage, logistics and produc- tion costs Enhance your range with wireless configu- ration and measured value display via Bluetooth[®] 	 Increase market share and expand project business due to compliance with the latest project specifications as well as a wide range of customer, NAMUR and international Ex requirements: intrinsically safe/flameproof, zones 1+2 Reliable integration into all leading systems Reliable measuring point information and redundant monitoring thanks to intelligent transmitter functions Maximum precision due to CvD sensor-/transmitter-matching and digital transmission Time savings due to fast wiring and commissioning 		

Compact devices and switches

Universal and quick, saving you space, time and money.

OEM applications require fast delivery times and reliable operation. In addition, the measuring technology used must be easy to install and the logistics straightforward. This compact devices meet these requirements to a tee. They are easy to commission, provide reliable measurements, can convert to standard signals and issue an alarm in the event of limit value violations.

- Accurate sensors and long term stable electronics
- Hermetically sealed enclosure made of stainless steel
- Compatible connection technology
- Versatile process adapters, flexible insert lengths
- Easy installation, configuration on site and via PC
- Patented insert concept and fastest response time on the market

Device type	Compact thermometers	Temperature a	and flow switches	
Model	TMR31L / OTMR35 / OTM311	OTR31 / OTR35	DTT31L / ODTT35	
Design				
Brief description	Extremely fast, compact and hermetically sealed temperature measuring point. IP69K; also available in hygienic version. 4-wire Pt100 or 4-20 mA, with fixed settings or freely configurable.	Similar to TMR3x, but always with integrated display, on-site operation and switch outputs. Intelligent, configurable limit functions and alarm.	Reliable measuring principle (compared to OTR31), but for flow monitoring in liquid media. Sensor design independent of flow direction. On-site operation with "teach-in" function.	
Configuration	PC/CDI (M12); OTM311 via IO-Link	PC/CDI (M12)		
Input / sensor	Pt100	Pt100	Patented sensor, operates independently of flow direction, 0.03 to 3m/s	
Output	4 to 20 mA/Pt100	4 to 20 mA, 1 or 2 switch outputs		
Your benefits	 Seize opportunities in a fast-growing market segment Perfect addition to product range Easy to use 	 Ideal complement to existing thermometer range and completion of portfolio with compact flow switch Available immediately Wide range of process connections and versions 		

Interface devices and electromechanical paddle switches

Reliable devices for guaranteed safety.

Specific features:

- Bidirectional transmission of HART signals
- In accordance with NE43
- Communication jacks for easy configuration of sensors via HART

Application	Bulk solids detection	Active barrier	Active barrier	
Model	OFTE20	ORN42	ORN22	
Design				
Brief description	Electromechanical paddle switch for granular solids. Full-state, empty-state or refill-state indicator, available for non-Ex and Ex locations.	1-channel and active barrier for safe isolation of 4 to 20 mA standard signal circuits, wide range power supply, optional 180° rotated installation	Intrinsically safe 24 VDC compact interface module for use in hazardous areas, SIL systems	
Software / functions	Function test, rotation monitoring, integrated alarm lamp, tool-free adjust- ment to density of bulk solids.	1-channel	1-channel 2-channel Signal doubler	
Configuration	Bulk density can be adjusted via switch		-	
Input	Bulk solids detection via rotating paddle	0/4 - 20 mA / HART feeding/not feeding	0/4 - 20 mA / HART feeding/not feeding	
Output	Relay	0/4 - 20 mA / HART active/passive	0/4 - 20 mA / HART active/passive	
Power Supply	230 VAC 50/60 Hz 115 VAC 50/60 Hz 24 VAC 50/60 Hz 20 bis 28 VDC	24 to 230V AC/DC	24 V DC	
Your benefits	 Savings in terms of logistics, commissioning and inventory management due to spring terminal technology, a lasermarked wiring diagram and a terminal head that can be rotated 360° Maintenance-free operation thanks to robust technology in a compact design Transparent, anti-loss cover enables function checks without opening the device For use in non-Ex and Ex applications thanks to international approvals and tests 	 Compatibility to all standard 4-20mA measuring points with or w/o HART offers worldwide excellent business opportunities. One device for a variety of applications reduces the number of stockable components. SIL 2 (SC3) as per IEC 61508 expands application and thus sales opportunities into safety-critical areas. 	 Compatibility to all standard 4-20mA measuring points with or w/o HART in widespread 24V powered networks offers excellent business opportunities. Time and cost saving installation due to push-in terminals, slim housing design, easy HART access and optional 2 channel version. One device for a variety of applications to dramatically reduce the number of stockable components. SIL 2 (SC3) as per IEC 61508 expands application and thus sales opportunities into safety-critical areas. 	

Software and tools

State-of-the-art tools provide efficiency and a profitable business.

FDC tool Field Device Configurator

- Powerful and easy MS Windows[®] tool for parameterization of programmable temperature transmitters
- Versatile using the standard TXU10L interface cable (point-to-point)
- Fast, easy and intuitive to use



WFDC app

- Compatible with Android[®] or iOS[®] devices.
- Powerful Bluetooth[®] tool for mobile devices for device operation and measured value read-out
- Remote parametrization of temperature transmitters with Bluetooth[®] technology

			HE HEAR CH.	Device information		
2200000 S Duters 01/0722 HRRT Diagnostics 041-Sensor interrupted	PV 23. Depekt Main Nam	Sinten signal	(Cold)	Device tag Depuis OTMIT2 HART Device type ntAF tat721 Senial number NUTTTO-5370 Formass version 01.01.05 Order code 01.0122		Device management Device management Device Total 2015 Device Total 2015 Device management Total 1917
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🚯 Bluetooth

OMS20 visualization software

- Produce documentation and analyze processes efficiently
- Essential version comes with our data managers (ORSG35 and ORSG45) to archive, visualize and analyze process events
- Multiple display and print options the perfect complement to our modern data managers.
- Access to fast SQL database either locally or through the network.
- Protection against tampering and unauthorized access or device parameters and measured values.
- Ensures compliance with internal company standards and quality assurance along with fulfillment of legal requirements.



Modules and accessories

Offering added value to complement your product range.

Tested modules, assemblies and spareparts

- For maximum flexibility, we provide tested modules to ensure that you can fulfill your orders quickly and in accordance with your customers' needs.
- Proven device modules reduce risk and allow fast delivery times.

Innovative sensor technologies

- Pick from a wide portfolio for every measurement application
- Thermocouple and RTD technology
- PT100 inserts:
 - Thinfilm Wirewound iTHERM QuickSens: fastest response time

OTID10 display unit

- Pluggable display for compatible head transmitters
- Dot-matrix display
- Compatible with: OTMT71, OTMT72, OTMT82, OTMT84, OTMT85

Generic terminal heads

These either will become assembled with insert and thermowell or can be used in conjunction with a head transmitter as remote field transmitters.

- OTA30A with or without display window
- OTA30D with cover for installing 2 head transmitters
- OTA30H with or without display window for explosion proof applications
- All types available in multiple cable entry and sensor connection combinations

TXU10L configuration kit

- USB to CDI adaptor cable
- Providing an universal connection to your PC's USB-port
- With the plug-in adapter it is suitable for analog products with M12 connection











→ Further information

For more information on products from Endress+Hauser, please see the following brochures:

- Temperature measurement technology FA00006T
- System components and data manager FA00016K

See as download under: www.endress.com/download



You are interested in our Dual Label devices? Check out how easy it is to personalize them:







www.adresses.endress.com

