

Temperature Measurement

Transmitters for mounting in sensor head

SITRANS TH300
two-wire system, universal, HART

Selection and Ordering data	Article No.
Temperature transmitter SITRANS TH300	
for installation in connection head, type B (DIN 43729), two-wire system 4 ... 20 mA, communication capable to HART, with galvanic isolation	
• Without explosion protection	▶ ◆ 7NG3212-0NN00
• With explosion protection	
- to ATEX	▶ ◆ 7NG3212-0AN00
- to FM (cFM _{US})	▶ ◆ 7NG3212-0BN00
Further designs	Order code
Add '-Z' to Article No. and specify Order code(s)	
with test protocol (5 measuring points)	C11
Functional safety SIL2	C20
Functional safety SIL2/3	C23
Customer-specific programming	
Add '-Z' to Article No. and specify Order code(s)	
Measuring range to be set Enter in plain text (max. 5 digits): Y01: ... to ... °C, °F	Y01¹⁾
Measuring point no. (TAG), max. 8 characters	Y17
Measuring point descriptor, max. 16 characters	Y23
Measuring point message, max. 32 characters	Y24
Pt100 (IEC) 2-wire, R _L = 0 Ω	U02
Pt100 (IEC) 3-wire	U03
Pt100 (IEC) 4-wire	U04
Thermocouple type B	U20
Thermocouple type C (W5)	U21
Thermocouple type D (W3)	U22
Thermocouple type E	U23
Thermocouple type J	U24
Thermocouple type K	U25
Thermocouple type L	U26
Thermocouple type N	U27
Thermocouple type R	U28
Thermocouple type S	U29
Thermocouple type T	U30
Thermocouple type U	U31
With TC: CJC internal	U40
With TC: CJC external (Pt100, 3-wire)	U41
With TC: CJC external with fixed value, specify in plain text	Y50
Special differing customer-specific programming, specify in plain text	Y09²⁾
Fail-safe value 3.6 mA (instead of 22,8 mA)	U36
Cable extension Transmitter with installed cable extension 150 mm (5.91 inch), for Pt100 in four-wire system	W01

Accessories	Article No.
CD for measuring instruments for temperature	A5E00364512
With documentation in German, English, French, Spanish, Italian, Portuguese and SIPROM T parameterization software	
HART modem	
• With RS 232 connection	▶ 7MF4997-1DA
• With USB connection	▶ 7MF4997-1DB
SIMATIC PDM operating software	See Section 9
DIN rail adapters for head transmitters	7NG3092-8KA 7NG3092-8KC
Connecting cable	
4-wire, 150 mm, for sensor connections when using head transmitters in the high hinged cover (set with 5 units)	

▶ Available ex stock.

◆ We can offer shorter delivery times for configurations designated with the Quick Ship Symbol ◆. For details see page 9/5 in the appendix.

- Here, you enter the initial and final value of the desired measurement range for customer-specific programming for mV, Ω.
- If needed, here you can mention settings, which cannot be specified with existing order codes (e.g.: programming for mV, Ω).

Supply units see Chapter 7 "Supplementary Components".

Ordering example 1:

7NG3212-0NN00-Z Y01+Y17+U03
Y01: -10 ... +100 °C
Y17: TICA123

Ordering example 2:

7NG3212-0NN00-Z Y01+Y23+ U25+U40
Y01: -10 ... +100 °C
Y23: TICA1234HEAT

Factory setting:

- Pt100 (IEC 751) with 3-wire circuit
- Measuring range: 0 ... 100 °C (32 ... 212 °F)
- Fault current: 22.8 mA
- Sensor offset: 0 °C (0 °F)
- Damping 0.0 s