

# Temperature Measurement

## Transmitters for mounting in sensor head

**SITRANS TH200**  
two-wire system, universal

Selection and Ordering data	Article No.
<b>Temperature transmitter SITRANS TH200</b>	
for installation in connection head, type B (DIN 43729), two-wire system, 4 ... 20 mA, programmable, with electrical isolation	
• Without explosion protection	▶ ◆ <b>7NG3211-1NN00</b>
• With explosion protection	
- to ATEX	▶ ◆ <b>7NG3211-1AN00</b>
- to FM (cFM <sub>US</sub> )	▶ ◆ <b>7NG3211-1BN00</b>
<b>Further designs</b>	Order code
Add <b>'-Z'</b> to Article No. and specify	Order code(s)
With test protocol (5 measuring points)	<b>C11</b>
Functional safety SIL2	<b>C20</b>
Functional safety SIL2/3	<b>C23</b>
<b>Customer-specific programming</b>	
Add <b>'-Z'</b> to Article No. and specify	Order code(s)
Measuring range to be set Enter in plain text (max. 5 digits): Y01: ... to ... °C, °F	<b>Y01<sup>1)</sup></b>
Measuring point no. (TAG), max. 8 characters	<b>Y17</b>
Measuring point descriptor, max. 16 characters	<b>Y23</b>
Measuring point message, max. 32 characters	<b>Y24</b>
Pt100 (IEC) 2-wire, R <sub>L</sub> = 0 Ω	<b>U02</b>
Pt100 (IEC) 3-wire	<b>U03</b>
Pt100 (IEC) 4-wire	<b>U04</b>
Thermocouple type B	<b>U20</b>
Thermocouple type C (W5)	<b>U21</b>
Thermocouple type D (W3)	<b>U22</b>
Thermocouple type E	<b>U23</b>
Thermocouple type J	<b>U24</b>
Thermocouple type K	<b>U25</b>
Thermocouple type L	<b>U26</b>
Thermocouple type N	<b>U27</b>
Thermocouple type R	<b>U28</b>
Thermocouple type S	<b>U29</b>
Thermocouple type T	<b>U30</b>
Thermocouple type U	<b>U31</b>
With TC: CJC internal	<b>U40</b>
With TC: CJC external (Pt100, 3-wire)	<b>U41</b>
With TC: CJC external with fixed value, specify in plain text	<b>Y50</b>
Special differing customer-specific programming, specify in plain text	<b>Y09<sup>2)</sup></b>
Fail-safe value 3.6 mA (instead of 22,8 mA)	<b>U36</b>
Cable extension Transmitter with installed cable extension 150 mm (5.91 inch), for Pt100 in four-wire system	<b>W01</b>

Accessories	Article No.
<b>Modem for SITRANS TH100, TH200 and TR200 incl. SIPROM T parameterization software</b> With USB connection	▶ <b>7NG3092-8KU</b>
<b>CD for measuring instruments for temperature</b> With documentation in German, English, French, Spanish, Italian, Portuguese and SIPROM T parameterization software	▶ <b>A5E00364512</b>
<b>DIN rail adapters for head transmitters</b> (Quantity delivered: 5 units)	▶ <b>7NG3092-8KA</b>  <b>7NG3092-8KC</b>
<b>Connecting cable</b> 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.

<sup>1)</sup> Here, you enter the initial and final value of the desired measurement range for customer-specific programming for RTD and TC.

<sup>2)</sup> 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:

7NG3211-1NN00-Z Y01+Y17+U03  
Y01: 0...100 C  
Y17: TICA123

### Ordering example 2:

7NG3211-1NN00-Z Y01+Y23+ U25+U40  
Y01: 0...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