Handheld instrument

Display / Controller

Logger / EASYBus

Transmitter

Temperature probe

Alarm / Protection

Temperature-measuring transmitter in snap-on housing

GTP -SG
Temperature-measuring transmitter in snap-on housing

General:

Design-type: PC board completely ready for operation (sensor not included) with any measuring range and any output. 3-pin connection terminal for Pt 100 in 2 or 3-wire technology. Connection terminal for output in 2-, 3-, or 4-wire technology - depending on type desired.

Specification:

Sensor element:	for Pt 100 acc. to DIN IEC 751. Suitable sensors available (prepared or unprepared) from stock - please refer to pages 135-136.
Sensor connection:	2- or 3-wire connection. Automatic line resistance compensation for 3-wire connection.
Measuring ranges: from -200 ... +800 °C	
Standard ranges:	GTP 0100: 0 ... 100 °C GTP 0200: 0 ... 200 °C GTP 5050: -50 ... +50 °C GTP 5015: -50 ... +150 °C OPTION: any measuring range available against upcharge
Output signal:	4 - 20 mA (2-wire), optionally 0 - 1 V, 0 - 2 V, 0 - 5 V, 0 - 10 V (3- or 4-wire)
Auxiliary energy:	Uv = 12 ... 30 V DC (at 0-10 V: Uv = 18 ... 30 V DC)
Reverse voltage protection:	50 V permanent
Permissible impedance (at 4-20 mA):	R_A [Ω] ≤ (Uv [V] - 12 V) / 0,02 A
Permissible load (at 0-__Volt):	R_L > 3000 Ω
Operating temperature electronics:	0 ... +70 °C
Accuracy electronics:	±0,2 % FS
Temperature coefficient:	0,01 % / °C
Storage temperature:	-20 ... +70 °C
Relative atmospheric humidity:	0 ... 80 % RH (non-condensing) Option: encapsulated PC board
Type option:	for top-hat rail (panel mounting), Width of housing (pitch) 22.5 mm
Mounting:	4 holes, 3.5 mm Ø each
Mounting distance:	43,5 x 58 mm (W x H)
Miscellaneous:	potentiometer for zero point and scale
Electric connection:	screw-type terminals with wire protection and drill holes for testing pin, wire Ø max. 1,5 mm². option: screw-type/plug-in terminal

Option:

- **AV010:**
  option: output signal 0-10 V
- **AV...:**
  option: other output signal (please state desired voltage)
- **MB:**
  option: arbitrary measuring range (please state desired measuring range)
  No upcharge for option -AV.., -MB if more than 10 pieces are ordered.
- **LACK:**
  option: encapsulated PC board (for outdoor application, i.e. applications where condensation is possible)
  PC board for measuring transducer mounted in water-proof surface-type housing (IP65) p.r.t. type GTMU design-type 5 (page 103)

Order codes (examples):

GTP0100 / LACK:
PCB, 4-20 mA = 0 ... 100 °C, encapsulated PC board
GTP -SG / AV010, MB: -50...+200 °C:
snap-on housing, 0-10 V = -50 ... +200 °C

Temperature-measuring transmitter in snap-on housing

GNTP -SG
Temperature-measuring transmitter in snap-on housing

General:

Design-type: PC board completely ready for operation (sensor not included) with any measuring range and any output. 2-pin connection terminal for NiCr-Ni-sensor or compensation line. Optionally available: PC board with DIN type flat-pin jack free from thermo voltage for direct plug-in of temperature sensors with DIN type flat-pin plug. Connection terminals for output 2- to 4-pin (depending on output in 2-, 3- or 4-wire technology).

Specification:

Sensor element:	for NiCr-Ni (type K) acc. to DIN IEC 584, suitable sensor can be supplied custom-designed according to your specifications or in standard design from stock (p.r.t. pages 128-132)
Measuring range: from -200 till +1200 °C	
Standard ranges:	GNTP 0100: 0 ... 100 °C GNTP 0600: 0 ... 600 °C GNTP 01200: 0 ... 1200 °C GNTP 5015: -50 ... +150 °C GNTP 2030:-200 ... +300 °C OPTION: any measuring range available against upcharge
Output signal:	4 - 20 mA (2-wire), optionally available 0 - 1 V, 0 - 2 V, 0 - 5 V, 0 - 10 V (3- or 4-wire)
Auxiliary energy:	Uv = 12 ... 30 V DC (at 0-5 V, 0-10 V: Uv = 18 ... 30 V DC)
Reverse voltage protection:	50 V permanently
Permissible impedance (at 4-20 mA):	R_A [Ω] ≤ (Uv [V] - 12V) / 0,02 A
Permissible load (at 0-__Volt):	R_L > 10 kΩ
Operating temperature electronics:	0 ... +70 °C
Accuracy electronics:	±0,2 % FS ±0,5 °C
Temperature coefficient:	0,05 % / °C
Storage temperature:	-20 ... +70 °C
Relative atmospheric humidity:	0 ... 80 % RH (non-condensing) Option: encapsulated PC board
Type option:	for top-hat rail (panel mounting), Width of housing (pitch) 22.5 mm
Mounting:	4 holes, 3.5 mm Ø each
Mounting distance:	43,5 x 58 mm (W x H)
Miscellaneous:	potentiometer for zero point and scale
Electric connection:	screw-type terminals with wire protection and drill holes for testing pin, wire Ø max. 1,5 mm². option: screw-type/plug-in terminal

Option:

- **AV010:**
  option: output signal 0-10 V
- **AV...:**
  option: other output signal (please state desired voltage)
- **MB:**
  option: arbitrary measuring range (please state desired measuring range)
  No upcharge for option -AV.., -MB if more than 10 pieces are ordered
- **LACK:**
  option: encapsulated PC board
  (for outdoor application, i.e. applications where condensation is possible)
  PC board for measuring transducer mounted in water-proof surface-type housing (IP65) p.r.t. type GTMU design-type 5 (page 103)

Order codes (examples):

GNTP-SG / MB...: 0 ... 300 °C, LACK:
PCB, 4-20 mA = 0 ... 300 °C, encapsulated PCB board
GNTP5015-SG / AV: 0-1V: snap-on housing, 0-1 V = -50 ... +150 °C