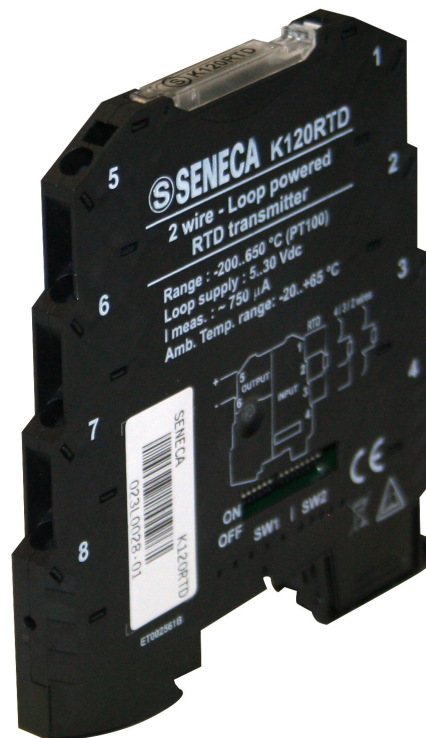


# K-LINE K120RTD

PT100, Ni100 / loop-powered converter

**K-LINE**

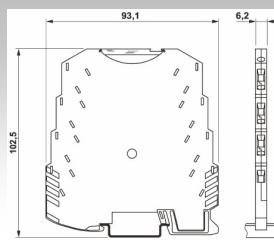
Temperature converters



- ▶ INPUT: PT100 (-200..+650°C), Ni100 (-60..+250°C)  
lowest span 20°C
- ▶ OUTPUT: N.1 channel current 4..20 or 20..4 mA
- ▶ Max Consumption 24 mA
- ▶ Measurement conversion 16 bit
- ▶ Power supply range 5..30 Vdc (loop powered)
- ▶ Tiny dimensions (6,2 x 93,1 x 102,5 mm)
- ▶ Precision class 0.1% or 0,1°C
- ▶ Programming via dip-switch or software  
(S117P, Configuration kit)

## TECHNICAL DATA

### K120RTD – PT100, Ni100 / loop-powered Converter



### ORDER CODES

**K120RTD** PT100, Ni100 / loop-powered converter

#### Accessories ( Programming )

- S117P**
- USB ↔ TTL-RS232 Serial Converter
  - USB cable
  - TTL cable
  - CD with drivers and KT120-SOFT

### GENERAL FEATURES

<b>Power supply</b>	5...30 Vdc
<b>Channels</b>	N.1 input, N.1 output
<b>Thermal derivation</b>	< 100 ppm/K
<b>Status indicators</b>	Anomaly, alarm
<b>Power supply on terminals</b>	Yes
<b>Hot swapping</b>	Yes
<b>Max Power consumption</b>	from 21 mA to 24 Vdc
<b>Lowest Consumption (no load)</b>	7,5 mA
<b>Galvanic isolation</b>	No
<b>A/D Conversion</b>	16 bit
<b>Rejection</b>	50 – 60 Hz (programmable)

<b>Filter</b>	Supplementary to reading stabilization
<b>DIP Switch</b>	-Inputs signal setup -Zero and Span configuration -Output signal setup
<b>Processing</b>	Floating point 32 bit
<b>Dimensions</b>	6,2 x 93,1 x 102,5 mm (w x h x d)
<b>Case, Weight, Color</b>	PBT, 45 g, black
<b>Operating temperature</b>	-20...+65 °C
<b>Connections</b>	Plug-in screw clamp terminal blocks, wires up to 2.5 mm <sup>2</sup>
<b>IP Protection</b>	IP 20
<b>Approvals</b>	CE, EN 61000-6-4, EN 61000-6-2
<b>Special Functions</b>	• Programmable Fault and shearing • Insertable Filter

### INPUT

**PT100** probe, (IEC 751 / EN 60751 – ITS90)  
 Connection by 2, 3 or 4 wires  
 Measurement Range: -200..650 °C  
 Min span : 20 °C

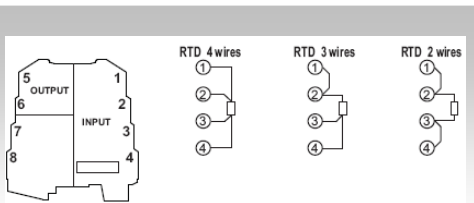
**Ni100** probe  
 Connection by 2, 3 or 4 wires  
 Measurement Range: -60..250 °C  
 Min span : 20 °C

### OUTPUT

**Current:**  
 Range:4..20 / 20..4 mA  
 Higher current for protection: 25 mA  
 Higher load resistance: 500 Ohm

## DIMENSIONS AND INSTALLATION

### Input

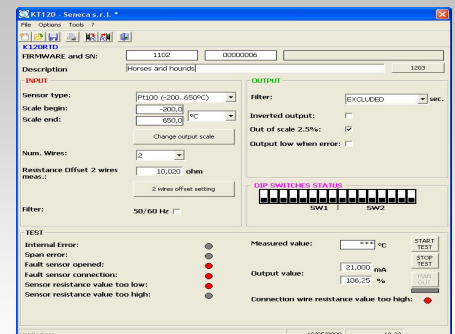


### Programming

#### Dip-switches

MEASUREMENT FULL SCALE							
SW2	1	2	3	4	5	6	°C
●	●	●	●	●	●	●	0
●	●	●	●	●	●	●	5
●	●	●	●	●	●	●	10
●	●	●	●	●	●	●	15
●	●	●	●	●	●	●	20
●	●	●	●	●	●	●	25
●	●	●	●	●	●	●	30
●	●	●	●	●	●	●	35
●	●	●	●	●	●	●	40
●	●	●	●	●	●	●	45
●	●	●	●	●	●	●	50
●	●	●	●	●	●	●	55
●	●	●	●	●	●	●	60
●	●	●	●	●	●	●	65
●	●	●	●	●	●	●	70
●	●	●	●	●	●	●	75
●	●	●	●	●	●	●	80
●	●	●	●	●	●	●	85
●	●	●	●	●	●	●	90
●	●	●	●	●	●	●	95
●	●	●	●	●	●	●	100
●	●	●	●	●	●	●	110
●	●	●	●	●	●	●	120
●	●	●	●	●	●	●	130
●	●	●	●	●	●	●	140
●	●	●	●	●	●	●	150
●	●	●	●	●	●	●	160
●	●	●	●	●	●	●	170
●	●	●	●	●	●	●	180
●	●	●	●	●	●	●	190
●	●	●	●	●	●	●	200
●	●	●	●	●	●	●	210
●	●	●	●	●	●	●	220
●	●	●	●	●	●	●	230
●	●	●	●	●	●	●	240
●	●	●	●	●	●	●	250
●	●	●	●	●	●	●	260
●	●	●	●	●	●	●	270
●	●	●	●	●	●	●	280
●	●	●	●	●	●	●	290
●	●	●	●	●	●	●	300
●	●	●	●	●	●	●	310
●	●	●	●	●	●	●	320
●	●	●	●	●	●	●	330
●	●	●	●	●	●	●	340
●	●	●	●	●	●	●	350
●	●	●	●	●	●	●	360
●	●	●	●	●	●	●	370
●	●	●	●	●	●	●	380
●	●	●	●	●	●	●	390
●	●	●	●	●	●	●	400
●	●	●	●	●	●	●	410
●	●	●	●	●	●	●	420
●	●	●	●	●	●	●	430
●	●	●	●	●	●	●	440
●	●	●	●	●	●	●	450
●	●	●	●	●	●	●	460
●	●	●	●	●	●	●	470
●	●	●	●	●	●	●	480
●	●	●	●	●	●	●	490
●	●	●	●	●	●	●	500
●	●	●	●	●	●	●	520
●	●	●	●	●	●	●	540
●	●	●	●	●	●	●	560
●	●	●	●	●	●	●	580
●	●	●	●	●	●	●	600
●	●	●	●	●	●	●	620
●	●	●	●	●	●	●	640
●	●	●	●	●	●	●	650

### Software



### Output & Power Supply

