

- **Compact High Performance**
- **Fits Standard Small Heads**
- **±0.15% Accuracy**
- **Any Temperature Range within Limits**
- **Output Linear with Temperature**
- **Loop-powered**
- **Adaptor for DIN Rail Mounting**
- **Accessories and Sensors Available**

### FUNCTION

The BASI temperature transmitter series BTT782 is a current loop transmitters, converts signals from various temperature sensors into standard current or voltage signal that can be safely sent over long distances to remote indicators, data loggers, or controllers. In addition to most common thermoresistance and thermocouple sensors, BTT782 transmitters may convert linear analog input signals (current or voltage). BTT782 transmitters are based on high tech integral circuits and have fixed input range. Two-wire or three-wire output options are available. Mounting options include sensor protection head type "B", watertight box with high protection class, and a case for mounting on a rail. BTT782 transmitters are exceptionally low-priced and can withstand considerable electromagnetic disturbances. They are perfect low-cost solution for general-purpose applications.

### SPECIFICATIONS GENERAL

#### INPUT

<b>Pt100, Pt50, Pt500, Pt1000</b>	: -50 → 500 deg C
<b>Cu100, Cu50</b>	: -50 → 500 deg C
<b>Thermocouple "E"</b>	: 0- +1000 deg C
<b>Thermocouple "J"</b>	: 0- +1000 deg C
<b>Thermocouple "K"</b>	: 0- +1300 deg C
<b>Thermocouple "L"</b>	: 0- +800 deg C
<b>Thermocouple "L-GOST"</b>	: 0- +800 deg C
<b>Thermocouple "U"</b>	: 0- +600 deg C
<b>Thermocouple "T"</b>	: 0- +400 deg C
<b>Current</b>	: 0-20mA
<b>Min Range</b>	: RTD 50, TC 250 degC
<b>Zero adjustment</b>	: +/- 10%
<b>Range adjustment</b>	: +/-10%

#### OUTPUT

<b>Signal type –two-wire</b>	: 4 to 20 mA
<b>Signal type –three-wire</b>	: 0-5, 0-20, 4-20 mA, 0-1, 0-2.5, 0-10, 1-5, 2-10VDC

<b>RTD output proportional to</b>	: Temperature
<b>TC output proportional to</b>	: Input voltage
<b>Current limit</b>	: Low=3mA, High=28mA
<b>Current limit selection</b>	: Jumpers
<b>Sensor break RTD</b>	: Low or High
<b>Sensor break TC</b>	: High=28mA
<b>Weight</b>	: 30g (B), 90g (C), 180g (D)



### ACCURACY

<b>Measurement error</b>	: ±0.15% % from span
<b>None linearity</b>	: ±0.1% from span
<b>Temperature drift</b>	: 0.02 % from span for 1 °C
<b>Cold junction compensation:</b>	Automatic hardware ± 1 °

### POWER SUPPLY

<b>For standard type</b>	: 8 to 36VDC (TC 12-36VDC)
<b>Admissible variations</b>	: 4 Vp-p@24V/20mA
<b>Max. line load</b>	: Max. 825 ohm(TC620 ohm) @ 24V/20mA

### OPERATING CONDITIONS

<b>Operating temperature</b>	: -20 to 75 °C
<b>Operating humidity</b>	: 0 to 95%RH, non-condensing
<b>EMC</b>	: EN50081-1, EN50082-2 89/336/EEC
<b>UL</b>	: E252086



### DESIGN AND MATERIALS

<b>Case material</b>	: Plastic
<b>Wiring</b>	: Screw terminals
<b>Central opening(in-head)</b>	: Diam 5mm
<b>Mounting in head</b>	: Diam.43 x30mm IP56,
<b>Weight</b>	: 30g
<b>Mounting on rail</b>	: 75 x17x60mm IP20, weight 90g

### ORDERING CODE

#### BTT782

<b>OUTPUT</b>	<b>INPUT</b>
2 2-wire	B Pt-50
3 3-wire	D Pt-100
	F Pt-500
	G Pt-1000
	H Cu50
	K Cu100
	J TC "J"
	K TC "K"
	L TC "L"
	T TC "T"
	U TC "U"
	C mA specify
	V VDC specify
	Z Specify

#### MOUNTING

B	Head type
C	DIN-rail
D	IP65