

- **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

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

OUTPUT

Signal type –two-wire	: 4 to 20 mA
Signal type –three-wire	: 0-5, 0-20, 4-20 mA, 0-1, 0-2.5, 0-10, 1-5, 2-10VDC
RTD output proportional to	: Temperature
TC output proportional to	: Input voltage
Current limit	: Low=3mA, High=28mA
Current limit selection	: Jumpers
Sensor break RTD	: Low or High
Sensor break TC	: High=28mA
Weight	: 30g (B), 90g (C), 180g (D)

ACCURACY

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

POWER SUPPLY

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

OPERATING CONDITIONS

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



DESIGN AND MATERIALS

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

ORDERING CODE

BTT782

OUTPUT	INPUT
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