

BTP-06 Temperature Sensor

BTP-06 sensor is a general-purpose extended range temperature sensor to measure temperature of air, soil, water, etc. The sensing element of the sensor is a platinum resistance Pt-100. The amplifier and signal conditioner circuits are integrated into the body of the sensor. The head of the instrument is made of perfectly watertight insulated chromium-galvanized copper. The whole device is filled out with two-component epoxy for the perfect insulation. The anti-radiation shield (shelter) is made from UV-resistant polycarbonate to keep the bright white color after years.



The BTP-06 device has RS-485 digital interface for general-purpose applications. The device is delivered with a 7-pin waterproof industrial connector for general purposes or with Vaseline-filled sensor cable to measure temperature under the ground level or under water.

The device has polyglot (multilingual) protocol to support Boreas' System-6 and the industry-standard MODBUS protocol simultaneously so the customer has the ability to use our latest development results with our BCU dataloggers or to implement industrial process control with MODBUS-compatible PLC. The serial interface has built-in over-voltage and lightning protection.

The BTPL-06 device implements our LogSense technology which implements the functionality of sensor and data logger with built-in solid-state memory. The stored data (with time stamp) could read out over the serial connector with our S6-ReadStation or MeteoLux program or can be transmitted over radio link or GPRS connection to our SocketServer. The LogSense device can control our ComBuoy communication device.

For particular demands the following sensors are available:

Sensor	Data Interface
BTP-06, BTPL-06	Digital RS-485
BTP-06/232, BTPL-06/232	Digital RS-232
BTP-06/AU, BTPL-06/AU	Analog 0-10 V (different ranges are available as well)
BTP-06/AI, BTPL-06/AI	Analog 4-20 mA (different ranges are available as well)

Technical Data

	Temperature
Measuring Range	-50...+70 °C
Resolution	0.1°C
Accuracy	0.2 °C FSR
Settling Time	10 sec.
Power	8-15 V / 1mA avg, 5 mA max.
Data Interface	Digital RS-485 or RS-232
Optional Data Interface	Analog 0-10 V, 4-20 mA
Communication	System-6 and MODBUS RTU protocol
Overvoltage Protection	+/- 6,7V 600W@1msec (data lines) +/- 17,1V 600W@1msec (power lines)

PRELIMINARY