

ITT SERIES

PROGRAMMABLE TEMPERATURE PROBES - 1/4"BSP - THERMOCOUPLE & PT100 ASSEMBLIES



These temperature probe assemblies are all constructed using a stainless steel sheath containing either a J or K type thermocouple or a P100 RTD sensor element.

The aluminum head contains a programmable 4-20mA transmitter which, although pre-programmed for the standard temperature range of the sensor can be changed by the user* so that the 4-20mA output corresponds to any temperature range within the sensors' capabilities.

A wide range of accessories can be chosen, from plastic and metal cable glands to compression fittings and stainless steel pockets (not supplied).

Please contact Sensata with details of the probe you are looking for and we will give you a very competitive quotation.

*Requires free software download from <u>https://www.cynergy3.com/sites/default/files/ITT_Config_upload_file_for_WIN7%2B.zip</u> and ICAB-1 cable

Features

- K or J Type Thermocouples
- PT100 RTD Sensors
- 4-20mA linearised output, configurable to application specific temperature
- 6mm stainless steel sheath



Transmitter Technical

Power Supply	Supply 12-35 Vdc 2-wire system	
Output	4-20mA	
Output Load R _L	500Ω maximum, typically 250Ω	
Typical Accuracy	RTD overall 0.1%, thermocouple overall 0.2%	
Temperature Drift	\leq 25 ppm/°C FS	
Op. /Ambient Temp	-20°C to +50°C	
Storage Temp	-40°C to +120°C	

Temperature Sensor Style

The standard sensor type is shown in the diagram below. The maximum ranges and factory configured ranges are as below:

Sensor Type	Max. Range	Pre-configured Range		
Ј-Туре	0°C to 1200°C	0 - 600°C = 4-20mA		
К-Туре	0°C to 1350°C	0 - 1000°C = 4-20mA		
RTD Type	-200°C to +850°C	0 - 200°C = 4-20mA		

A free software download is available from the Sensata website which enables the scaling of the 4-20mA output to be customized to suit your specific application.* The sheath length ranges from 100mm to 400mm for the PT100 sensor version and from 150mm to 400mm for the thermocouple sensor version. This style of thermocouple allows any standard 6mm compression fitting to be used, making it easy to fit the sensors to any process connection. The head mounting thread is 1/4"BSP.

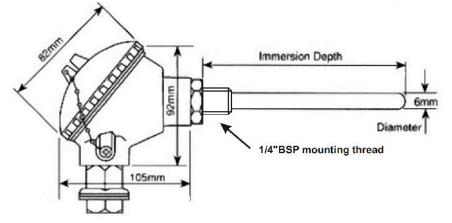
*Requires ICAB-1 USB to serial converter programming cable.

All dimensions are in millimeters.

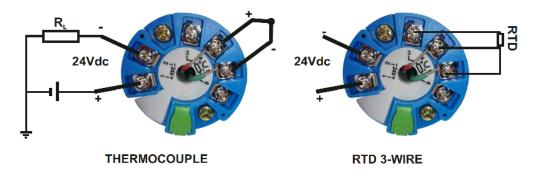
Connection Head

DIMENSIONS

The dimensions of the standard aluminum connection head are shown below



Part No.	Part No. Description		Part No.	Description
ITTP100A	PT100 6x100mm 4-20mA		ITTJ200A	J type 6x200mm 4-20mA
ITTP150A	PT100 6x150mm 4-20mA		ITTJ300A	J type 6x300mm 4-20mA
ITTP200A	PT100 6x200mm 4-20mA		ITTJ400A	J type 6x400mm 4-20mA
ITTP250A	PT100 6x250mm 4-20mA		ITTK150A	K type 6x150mm 4-20mA
ITTP300A	PT100 6x300mm 4-20mA		ITTK200A	K type 6x200mm 4-20mA
ITTP400A	PT100 6x400mm 4-20mA		ITTK300A	K type 6x300mm 4-20mA
			ITTK400A	K type 6x400mm 4-20mA



Made in the UK

Page 3

Sensata Technologies, Inc. ("Sensata") data sheets are solely intended to assist designers ("Buyers") who are developing systems that incorporate Sensata products (also referred to herein as "components"). Buyer understands and agrees that Buyer remains responsible for using its independent analysis, evaluation and judgment in designing Buyer's systems and products. Sensata data sheets have been created using standard laboratory conditions and engineering practices. Sensata has not conducted any testing other than that specifically described in the published documentation for a particular data sheet. Sensata may make corrections, enhancements, improvements and other changes to its data sheets or components without notice.

Buyers are authorized to use Sensata data sheets with the Sensata component(s) identified in each particular data sheet. HOWEVER, NO OTHER LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE TO ANY OTHER SENSATA INTELLECTUAL PROPERTY RIGHT, AND NO LICENSE TO ANY THIRD PARTY TECHNOLOGY OR INTELLECTUAL PROPERTY RIGHT, IS GRANTED HEREIN. SENSATA DATA SHEETS ARE PROVIDED "AS IS". SENSATA MAKES NO WARRANTIES OR REPRESENTATIONS WITH REGARD TO THE DATA SHEETS, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ACCURACY OR COMPLETENESS. SENSATA DATA SHEETS OR USE OF THE DATA SHEETS, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ACCURACY OR COMPLETENESS. SENSATA DISCLAIMS ANY WARRANTY OF TITLE AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, QUIET POSSESSION, AND NON-INFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY RIGHTS WITH REGARD TO SENSATA DATA SHEETS OR USE THEREOF.

All products are sold subject to Sensata's terms and conditions of sale supplied at www.sensata.com SENSATA ASSUMES NO LIABILITY FOR APPLICATIONS ASSISTANCE OR THE DESIGN OF BUYERS' PRODUCTS. BUYER ACKNOWLEDGES AND AGREES THAT IT IS SOLELY RESPONSIBLE FOR COMPLIANCE WITH ALL LEGAL, REGULATORY AND SAFETY-RELATED REQUIREMENTS CONCERNING ITS PRODUCTS, AND ANY USE OF SENSATA COMPONENTS IN ITS APPLICATIONS, NOTWITHSTANDING ANY APPLICATIONS-RELATED INFORMATION OR SUPPORT THAT MAY BE PROVIDED BY SENSATA.

Mailing Address: Sensata Technologies, Inc., 529 Pleasant Street, Attleboro, MA 02703, USA.

CONTACT US

+44 (0)1202 897969

7 Cobham Road,

Wimborne, Dorset,

c3w_sales@sensata.com

Cynergy3 Components Ltd.

Ferndown Industrial Estate,

BH21 7PE, United Kingdom