

## ITTU SERIES

### PROGRAMMABLE TEMPERATURE PROBES - 1/4"NPT - 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 PT100 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).

\*Requires free software download from [https://www.cynergy3.com/sites/default/files/ITT\\_Config\\_upload\\_file\\_for\\_WIN7%2B.zip](https://www.cynergy3.com/sites/default/files/ITT_Config_upload_file_for_WIN7%2B.zip) 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

## SPECIFICATIONS

### Transmitter Technical

<b>Power Supply</b>	12-35 Vdc 2-wire system
<b>Output</b>	4-20mA
<b>Output Load <math>R_L</math></b>	500 $\Omega$ maximum, typically 250 $\Omega$
<b>Typical Accuracy</b>	RTD overall 0.1%, thermocouple overall 0.2%
<b>Temperature Drift</b>	$\leq 25$ ppm/ $^{\circ}$ C FS
<b>Op. /Ambient Temp</b>	-20 $^{\circ}$ C to +50 $^{\circ}$ C
<b>Storage Temp</b>	-40 $^{\circ}$ C to +120 $^{\circ}$ 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
J-Type	0°C to 1200°C	0 - 600°C = 4-20mA
K-Type	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 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"NPT.

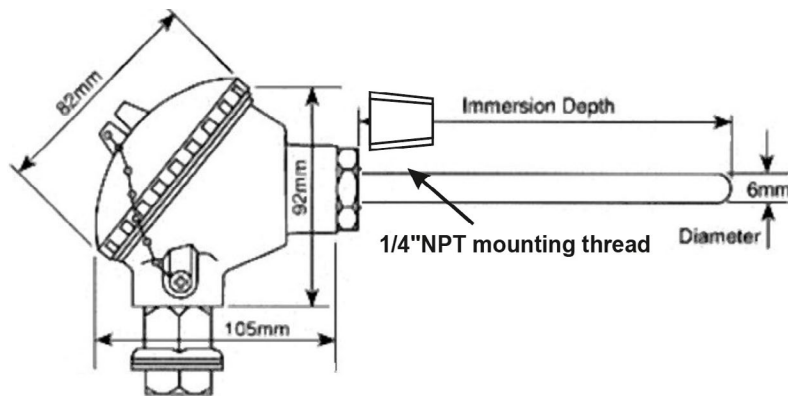
\*Requires ICAB-1 USB to serial converter programming cable.

## DIMENSIONS

All dimensions are in millimeters.

### Connection Head

The dimensions of the standard aluminum connection head are shown below



RS Stock No.	Description	RS Stock No.	Description
1747526	PT100 6x100mm 4-20mA	1747532	J type 6x200mm 4-20mA
1747527	PT100 6x150mm 4-20mA	1747533	J type 6x300mm 4-20mA
1747528	PT100 6x200mm 4-20mA	1747534	J type 6x400mm 4-20mA
1747529	PT100 6x250mm 4-20mA	1747535	K type 6x150mm 4-20mA
1747530	PT100 6x300mm 4-20mA	1747537	K type 6x200mm 4-20mA
1747531	PT100 6x400mm 4-20mA	1747538	K type 6x300mm 4-20mA
		1747539	K type 6x400mm 4-20mA

