



UNIHEAD-DISP

IN-HEAD TRANSMITTER WITH BUILT-IN DISPLAY

- Isolated Thermocouple & RTD inputs
- 4 Digit Display temperature in °C or °F
- Simple Configuration
- Push Button zero & span
- 4 – 20 mA 2-wire output
- Isolated Transmitter Supply
- ABS Plastic or Stainless steel housing
- 10 Year Warranty



Description

The UNIHEAD-DISP combines a standard universal input in-head transmitter with a loop powered display to give both a useful local indication of temperature and a standard 4-20mA process output.

500 V isolation is provided between the input and the 4-20mA 2-wire output which can drive into a load of 450 Ohms when using a nominal 24 Vdc supply.

The unit can be factory configured or user-configured using a simple USB connection and PC software. During this configuration the unit may be powered directly from the USB interface.

Non-interactive push button zero and span controls make adjustment of the 4-20mA output quick and simple.

Other features include high or low burnout indication either an ABS plastic enclosure or a stainless steel option

Inputs

Standard Ranges are shown below - contact Sales for others.

Thermocouples

Types: K	(-200 to 1370) 0.1% fsd +/-0.5°C
J	(-100 to 1200) 0.1% fsd +/-0.5°C
E	(-100 to 1000) 0.1% fsd +/-0.5°C
N	(-180 to 1300) 0.1% fsd +/-0.5°C
T	(-100 to 400) 0.2% fsd +/-0.5°C
R	(-10 to 1760) 0.1% from 800-1600°C
S	(-10 to 1760) 0.1% from 800-1600°C

Stability of 0.01% of fsd
Cold junction compensation
Upscale or downscale t/c burnout options
Impedance 1 MΩ

Resistance Thermometers

2 or 3 wire PT100
(-200 to 850) 0.05% rdg +/-0.1 °C
Maximum lead resistance 20 Ω
Lead effect 0.015 degC / Ω
Sensor excitation <450 uA



Parameter	Min	Typ	Max	Comments
Supply Voltage	15	24V	30	Max 450 ohm load with 24V supply
Supply Current (mA)	3.8	4 – 20	24	
Input Impedance (t/c)		1M Ω		
Calibration accuracy		+/- 5 μ A		
Isolation V		500		Input to output tested at 500V
Time Response 0-95%		<500mS		Start up time 3 seconds
Operating Ambient	-40°C		85°C	
Relative Humidity	10%		95%	non-condensing
Protection		IP67		With SCH4 Head
Approvals	CE tested to BS EN 61326			
Display	4 Digit seven segment LED height 7.3mm			
Display resolution	0.1 degC 0.1 degF or 0.00 mA			
Display Errors	Err (sensor error) Flash OVEr (over range)		Flash Undr (under range)	
Notes	Accuracy for PT100 and t/c do not include sensor and cold junction errors			

Connection Details		
1.	Thermocouple -ve	or RTD
3 rd Wire		
2.	Thermocouple +ve	or RTD +ve
3.	Not connected	or RTD -ve
+	24 Vdc Supply	
-	4 – 20 mA Output	

Ordering Information	
Please supply:	
Part Number:	UNIHEAD-DISP
Input Type:	T/C, RTD
Input Range:	0-500°C
Options:	SCH4 ABS plastic head SCH15 Stainless head