

# C828 T/C RTD mV Head Display Transmitter (2 Wires Technology)



## Configurable 2 Wires Transmitter for T/C - RTD & mV Input & Output Completely Configurable

C828 is a transmitter, converter of electronic signal with a microprocessor circuit, designed and built with technologies of last generation

The transmitter C828 is completely configurable, as input it can accept the most common type of Sensors as T/C (Thermocouples) and RTD (Resistance Thermometers), but also linear signal in Tension (mV) and Resistance (Ohm).

The device is galvanically insulated and it is provided by an LCD display back-lit that can be seen also from the outside of the housing thanks to the transparent window.

The housing of the transmitter is a strong case made in light painted alloy with a shape of a connection head with a transparent window, which is proper for an industrial use both directly as connection head of complete sensors and for the field mounting with remote sensor.

Then, thanks to these characteristics, the device is really universal and easily adaptable to each operative situation.



Image of C828



**General Technical Features :**

Function: Configurable Signal Converter Transmitter  
 Technology: Microprocessor SMD circuit  
 Input: Configurable for T/C - RTD - mV - Ohm (Look at the complete Table)  
 T/C CJC Compensation of the Cold Joint : Automatic Configurable  
 Range and Accuracy: Look at the below Complete Input Table  
 Output: 4 ÷ 20 mA Linear (Resolution 0,3 uA)  
 Galvanic Insulation: U = 2000 Vac (Input/Output)  
 Response Time: 1 Second  
 Display: Back/lit LCD  
 Power Supply: 7,5 ÷ 45 Vdc (Suggested 24 Vdc)  
 Operative and Stocking Conditions: -40 ÷ 85 °C - 0 ÷ 80 UR% Not condensation  
 Shock & Vibrations: 4 g/2 @ 150 >Hz (IEC 60 068-26)  
 Electromagnetic Compatibility: According GB/T17626.2-1998 - Compliance with IEC 61000-4-3:1995  
 Explosion: Intrinsically safe : Exia II CT4  
 Housing: In Light Alloy ADC12 - Painted - Provided by a transparent window for the Display - Ip66 Installed  
 Max Dimension: look on the back data sheet  
 Weight: 800 g about  
 Mounting: Outdoor and on Sensors  
 Electric Wiring: Terminal Board

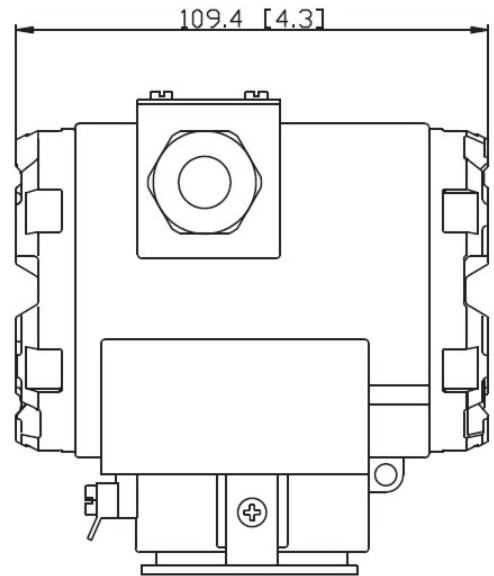
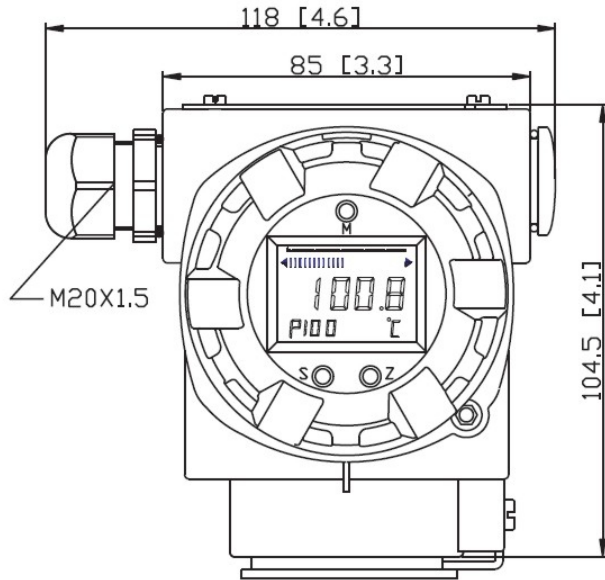
**Input Type - Ranges - Precisions**

Input	Type	Range	Min.Range	Precision	
RTD	Pt100	-200 ÷ 850 °C (-328 ÷ 1562 °F)	10K	0.2K or 0.08%	
	Pt500 ●	-200 ÷ 250 °C (-328 ÷ 482 °F)	10K		
	Pt1000 ●	-200 ÷ 250 C (-328 ÷ 482 °F)	10K		
		Cu50	-50 ÷ 150 °C (-58 ÷ 302 °F)	10K	0.2K or 0.08%
		Cu100	-50 ÷ 150 °C (-58 ÷ 302 °F)	10K	
		Ni100	-60 ÷ 180 °C (-76 ÷ 356 °F)	10K	0.3K or 0.12%
		Ni500 ●	-60 ÷ 180 °C (-76 ÷ 356 °F)	10K	
		Ni1000 ●	-60 ÷ 150 °C (-76 ÷ 302 °F)	10K	
Resistance (Ohm)		0 ÷ 400 Ω	10 Ω	±0,1 Ω or 0.08%	
		0 ÷ 2000 Ω	200 Ω		
T/C	T	-270 ÷ 400 °C (-454 ÷ 752 °F)	500K	0.5K or 0.08%	
	E	-270 ÷ 1000 °C (-454 ÷ 1823 °F)	50K		
	J	-210 ÷ 1200 °C (-346 ÷ 2192 °F)	50K		
	K	-270 ÷ 1372 °C (-454 ÷ 2501 °F)	50K	1.0K or 0.08%	
	N	-270 ÷ 1300 °C (-454 ÷ 2372 °F)	50K		
	S	-50 ÷ 1768 °C (-58 ÷ 3214,4 °F)	500K	2.0K or 0.08%	
	R	-50 ÷ 1768 °C (-58 ÷ 3214,4 °F)	500K		
	B	-0 ÷ 1820 °C (-32 ÷ 3308 °F)	500K		
Tension		-10 ÷ 75 mV	5mV	±20 μV or 0.08%	
		-100 ÷ 100 mV ●	5 mV		
		-100 ÷ 500 mV ●	6 mV		
		-100 ÷ 2000 mV ●	20 mV		

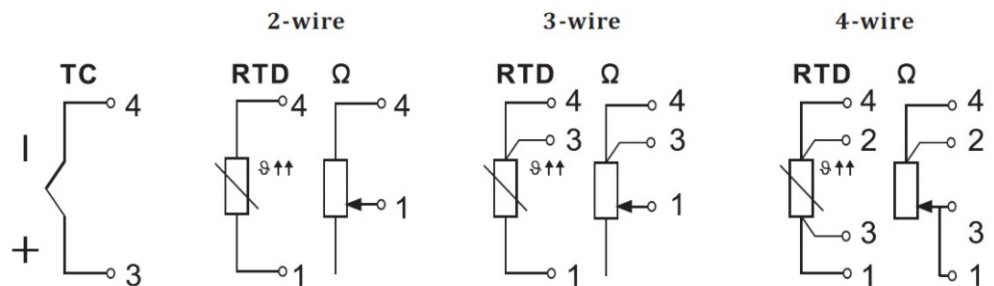
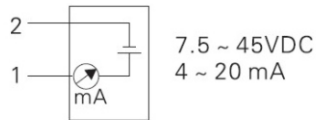
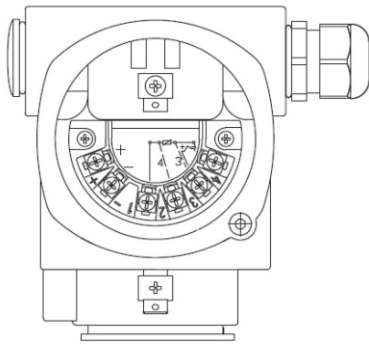
● Only On-Demand Optional Inputs



## Dimension mm (in):



## Wiring:



## How To Order:

C828 - Art. 5B131 - T/C RTD mV Ohm Head Universal Transmitter With Display -IP66 - (2 Wires)

### Services:

Art. 5B141 - SMART1-CAH-CFG HART - © HART Loop Configuration KIT

### Optional Services:

Complete Sensor With Direct Transmitter Included

Calibration & Certification ISO or SIT Services

Private Label Customize Program for OEM (Minimum Quantity Order)

### Other Suggestions:

C804-S04-M - Power Supply 85 ÷ 264 Vac 24 Vdc Din Rail - Slim Line - Art.5A960

C810-1PH - Antinoise Filter - Single Phase Ver. 10A - Art. 5596

C810-FUL-1PH - Extra Tension Protection Module - Single Phase - Art. 5861



**CEAM** Control equipment®

Company With Quality System Certified  
ISO 9001 / 2008

Via Val D'Orme No. 291 - 50053 Empoli (FI) Italy Tel.(+39) 0571 924181 - Fax. (+39) 0571 924505 - Skype Name: ceam\_info

Internet Web Portal: [www.ceamgroup.com](http://www.ceamgroup.com) - E.mail: [info@ceamgroup.it](mailto:info@ceamgroup.it) - Division Web: [www.ceamcontrolequipment.it](http://www.ceamcontrolequipment.it) - Support Web: [www.ceamsupport.it](http://www.ceamsupport.it)

File: C828\_5B131\_UK\_S1 - Rev. 02/13 - © www.ceamgroup.com - Il presente documento è puramente indicativo, e la CEAM si riserva la facoltà di modificarne il contenuto senza darne preavviso alcuno