

## MCT8081 Digital Temperature Gauge



MCT8081 Digital Temperature Gauge is a battery powered intelligent temperature gauge with high precision, simple operation and reliable self-protection function. The product applies whole electronic structure and chip, with fast sampling speed, digital filtering techniques to ensure its high accuracy, low drift and reliable performance. It consists of RTD or thermocouple and temperature transmitter module to measure the temperature of the objects and gives an on-site LCD (or LED) display to indicate the measurements temperature value. The products are extensively applied in the petroleum, chemistry industry, metallurgy, electric power, textile industry, food processing etc.

MCT8081 Digital Temperature Gauge can be applied to liquid, gaseous or vaporous media with optional ex-proof type. It is suitable for on-site temperature measurement or high-precision temperature measurement in laboratories. As an excellent alternative to mechanical temperature gauge with high precision, it also can be used to calibrate general thermometers.

### **Technical Parameters:**

Power: 3.6V battery; or AC220V; or DC24V;

Case diameter: 100mm

Range: -200~450C User specified

Accuracy: 0.5%

Probe length: User specified

Connection: Fixed connection or Sliding connection. Thread or Flange or Customized. G1/4" or G1/2" or NPT or Customized.

Sensing element: RTD or thermocouple

Dial graduation: Standard in dual ranges °F and C

Probe sensor: Stainless steel or PTFE lined

Field LED or LCD display

Operating temperature and humidity:-20~60C, ≤85%RH

Micro-power consumption, over 2 years in power-saving mode, continuous work 2,000 hours.

Sampling rate: 4 times/sec

Ex-proof class of Ex type: Exd II BT4

Protection rate: IP65

**Ordering Codes (Model Selections):**

MCT8081	Digital Temperature Gauge	
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-	Housing type	None: 100mm display diameter Ex: Ex-proof cast alloy aluminum Z: Back connection
-	Temperature range	e.g. (0- 100C) or (0-200°F) etc.
-	Wet Part Material	-S4: 304 Stainless Steel -S6: 316 Stainless Steel -S0: specified
-V	Power Supply	None: Battery 1: 24VDC 2: 220VAC
-O	Output	None: without 1: signal output 4-20mA 2: signal output 0-5V 3: signal output 0- 10V 4: signal output RTD 5: signal output thermocouple 0: customer specified
-A	Installment type	1: fixed thread 2: slide adjustable thread 3: rotatable adjustable thread 4: flange 5: clamp 0: customer specified
	Thermo well	None: without TW: with thermo well
-	Size of installment	e.g. for A1, - 1/2BSP or -M20*1.5 etc.; for A3, -2" or 3" etc.
-	(Probe length)	E.g. -200 (200mm), or -8" etc.

**MCT8082 :**



**MCT8081-ZP:**



**Operating instructions**

Open/close the temperature gauge: short time press "ON/OFF" button.

Shift engineering unit: long time press "ON/OFF" button.

Clean the peak temperature value: short time press "ZERO" button.

Some setting menus:

“lock”: password input menu, input password 1000

“off”: auto-shut off time menu, available time,00~15minutes,00 means no auto-shut off function.

“bclt”: back light time Manuel, available time,00~15minutes,00 means no back light function.

“end-”: exit menu, 0 or 1.0 means exiting without keeping the previous setting records, 1 means exiting with keeping the previous setting records.

When setting menus, buttons and their functions:

“ON/OFF” button: short press it to change the currently flashing valves (when the first digit is flashing) or confirm the above the change (when flashing stops).

“ZERO” button: short press it to modify the currently flashing values, long press it shift the digit.

How to set auto-shut off time and back light time:

Press "ZERO "button and "ON / OFF" button at the same time, when "lock "shows in the small screen, input 1000,then press "ON / OFF "button to confirm, then into menu situation.

Short press “ZERO “button to choose the menu.

Short press “ON/OFF “button to change the value.

Short press “ON/OFF “button to confirm the change of the value.

Short press ZERO “button to choose “end-”menu, then keep the change.