

POTENTIOMETER CONTROLLER

CS2-PM^(1.1)

FEATURE

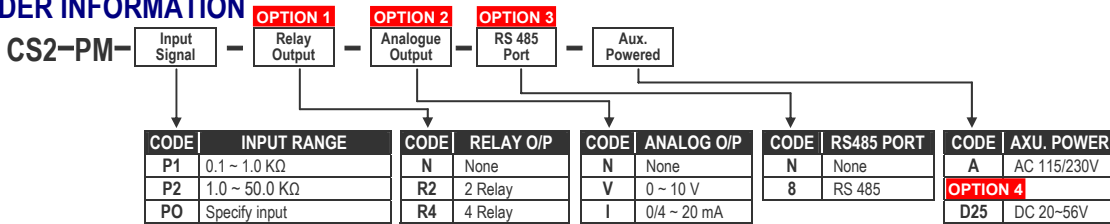
- Measuring potentiometer from 0.1~1.0/100.0KΩ (3 wired)
- Accuracy: ± 0.04%; Display range: -19999~29999
- User function, Easily programmable via the front panel
- **Field calibration with potentiometer to meet the system requirement**
- **4 relay for Hi / Lo / Go / DO energized with Start Delay / Hysteresis / Energized & De-energized Delay / Relay Energized Hold..... functions**
- Analogue output and RS 485 communication port in option
- **3 external control inputs for Relative PV / PV Hold / Maximum or Minimum Hold / DI / Reset for Relay Energized Hold.....**
- CE Approved



The Newest

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ORDER INFORMATION



SPECIFICATION

Measuring Range	Input Impedance	Excitation Voltage
0.1 ~ 1.0 KΩ (3 wired)	≧ 1M ohm	About 0.2V
1.0 ~ 50.0 KΩ (3)	≧ 1M ohm	About 1.6V

- Calibration: System calibration by front key
- **Field calibration function:** Calibration with field signal input high & low, and field calibration reset without influence factory calibration
- Accuracy: ≤ ± 0.04% of FS ± 1C;
- Response time: ≤ 100 msec.(when the AvG = "1")

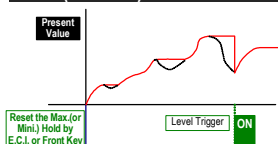
Operating

- Operation key: 4 keys for Enter(Function) / Shift(Escape) / Up / Down
Up key: increase the number / back to previous function
Down key: decrease the number / go to next function
Shift/Esc key: move the flash digit position / Return back to upper level
Enter/Fun key: enter the parameters you set or function select
- Security function: 4 digits password
- Lock function: 3 function group lock level for None/User Level/ Engineer Level / All(Engineer Level & User Level)

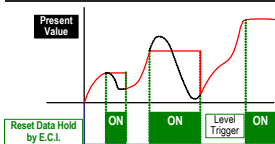
Display functions

- LED: Measuring value: 0.56" red high-brightness LED
Relay output indication: square red LED
External control input: square green LED
RS 485 communication: square red LED
Max. / Mini. Hold: square red LED
- Low Cut function: Low.cut :Settable range: 000~5000 counts
- Average function: AvG :Settable range: 1~99 times
- Digital Filter function: D.FiLt : Settable range: 0(None)/1~99 times
- Over range indication: ovFL, when input is over 120% of input range Hi
- Under range indication: -ovFL, when input is under -120% of input range Lo
- Display functions: Present Value / Maximum Hold / Minimum Hold / Write to display by RS485 command

Max. (or Mini.) Hold & Reset

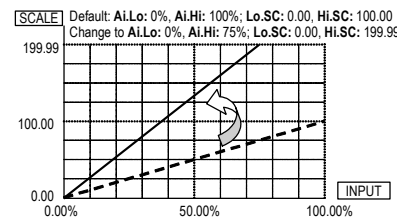


Data Hold & Reset



Scaling

- Input range function: Ai.Lo: 0~100% of input
Ai.Hi: 0~100% of input
- Scaling function: Hi.SC(High scale): -19999~29999
Lo.SC(Low scale): -19999~29999

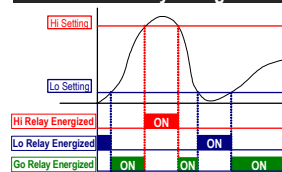


- Decimal point: Settable from 00000~0.0000

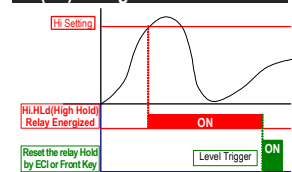
Control functions

- Control relay: 2 Relays SPDT, 5A/230Vac, 10A/115V
2 Relays SPST, 1A/230Vac, 3A/115V
- Relay Output: Energized levels compare with set-points:
Hi / Lo / Hi.HLd / Lo.HLd / do / Go-1.2 / Go-2.3
DO function: Energized by RS485 command
Relay Energized Hold : Selectable Low or High Hold

Hi / Lo / Go Relay Energized

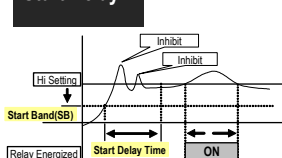


Hi(Lo) Energized Hold & Reset

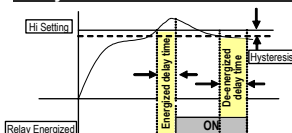


- Functions: Start delay / Energized & De-energized delay / Hysteresis
Start band: 0~9999 counts
Start delay time: 0:00.0~9(Minutes):59.9(Second)
Energized delay time: 9(Minutes):59.9(Second)
De-energized delay time: 9(Minutes):59.9(Second)
Hysteresis: 0~5000 counts

Start Delay



Energized / De-energized Delay & Hysteresis



C2-05

POTENTIOMETER CONTROLLER

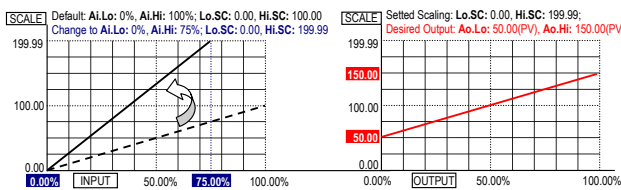
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External Control

- **Input mode:** 3 ECI points, Contact or open collect input
- **Functions:** Relative PV / PV Hold / Reset Max or Mini. Hold / DI / Reset for Relay Energized Hold
Debouncing time: 5 ~255 x 8mseconds

Analogue output(option)

- **Accuracy:** $\leq \pm 0.1\%$ of F.S.; 16 bits AD converter
- **Ripple:** $\leq \pm 0.1\%$ of F.S.
- **Response time:** ≤ 200 msec. (10~90% of input)
- **Isolation:** AC 2.0 KV between input and output
- **Output range:** Specify Voltage or Current
Voltage: 0~5V / 0~10V / 1~5V selectable
Current: 0~10mA / 0~20mA / 4~20mA selectable
- **Output Capability:** **Voltage: 0~10V; $\geq 1000\Omega$;**
Current: 0(4)~20mA; $\leq 600\Omega$
- **Functions:** **Ao.Hi(output high): PV Hi vs. output range Hi**
Ao.Lo(output range Low): PV Low vs. output range Lo
Ao.LM(output High Limit):
0.00~110.00% of output High



RS 485 communication(optional)

- **Protocol:** Modbus RTU mode
- **Baud rate:** Selectable 2400/4800/9600/19200/38400
- **Data bits:** Selectable 7 or 8 bit
- **Parity:** Selectable Even, odd or none (with 1 or 2 stop bit)
- **Device no:** Settable 1 ~ 255
- **Write function:** Write to display value from PC's RS485 command

Power

- **Power Supply:** AC 115/230V $\pm 10\%$, 50/60Hz; **Optional DC 20~56V**
- **Power consumption:** 5.0VA
- **Back up memory:** By EEPROM

Environmental

- **Operating temperature:** 0~60 °C
- **Operating relative humi.:** 20~95 %RH, Non-condensing
- **Temperature coefficient:** ≤ 100 PPM/°C
- **Storage temperature:** -10~70 °C
- **Enclosure:** Front panel: IEC 549 (IP54)

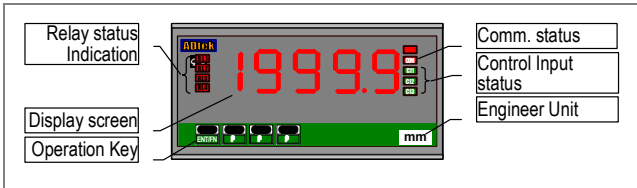
Electrical safety

- **Dielectric Strength:** AC 2.0 KV for 1 min
Between Power / Input / Output / Case
- **Insulation resistance:** $\geq 100M$ ohm at 500Vdc
- **Isolation:** Between Power / Input / Output
- **EMC:** EN61326
- **Safety:** EN61010

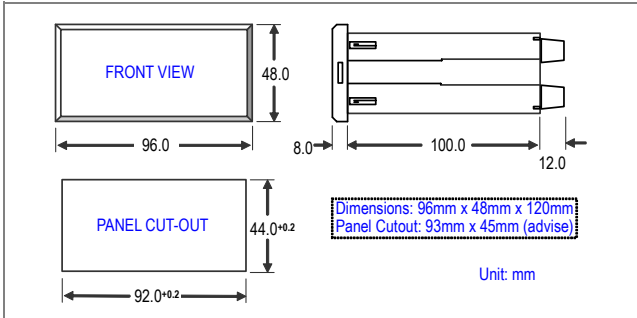
Mechanical

- **Dimensions:** 96mm(W) x 48mm(H) x 120mm(D)
- **Panel cutout:** 92mm(W) x 44mm(H)
- **Case Materiel:** ABS fire-protection (UL 94V-0)
- **Mounting:** Panel flush mounting
- **Terminal block:** Plastic NYLON 66 (UL 94V-0)
10A 300Vac, M2.6, 16~22AWG
- **Weight:** 550g

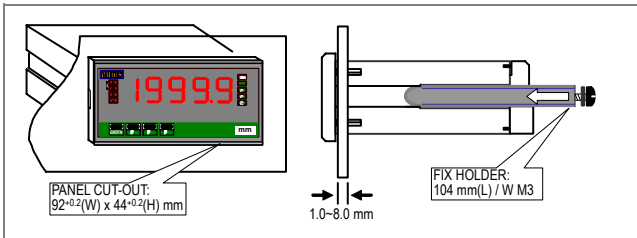
FRONT PANEL



DIMENSIONS



INSTALLATION



CONNECTION DIAGRAM

