

PROCESS CONTROLLER

CS2-PR^(1.3)

FEATURE

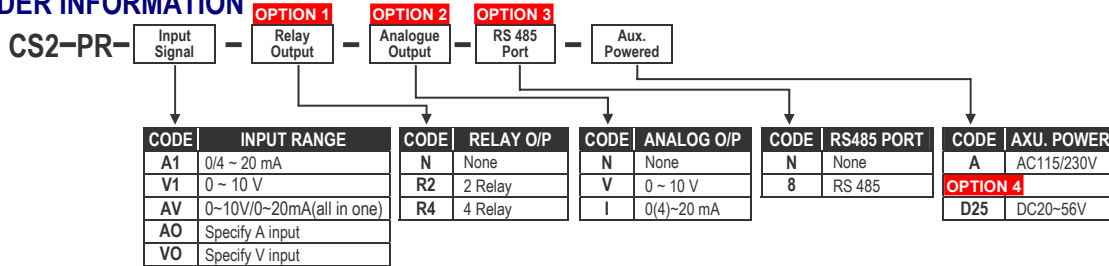
- Measuring linear signal 0~10V / 0(4)~20mA in one controller
- Accuracy: $\pm 0.04\%$; 4 1/2 Digital display: -19999~29999
- User function, Easily programmable via the front panel
- **4 relay for Hi / Lo / Go / DO energized with Start Delay / Hysteresis / Energized & De-energized Delay / Relay Energized 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

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The Newest

ORDER INFORMATION



SPECIFICATION

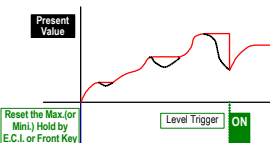
Measuring Range	Input Impedance	Measuring Range	Input Impedance
Voltage 0 ~ 10 V	$\geq 1M$ ohm	Current 0(4)~20 mA	250 ohm

➤ The Meter can be 0-10V and 0-20mA in one unit, according to connection #11 or #12

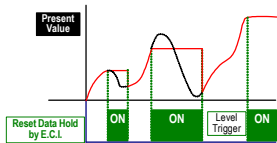
- Calibration: System calibration by front key
- Accuracy: $\leq \pm 0.04\%$ of FS
- Response time: ≤ 100 msec.(when the AvG = "1")
- **Operating**
- Operation key: 4 keys for Enter(Function) / Shift(Escape) / Up / Down
Up key: increase the number / back to previous function
Down key: decrease the number / 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: -19999~19999 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



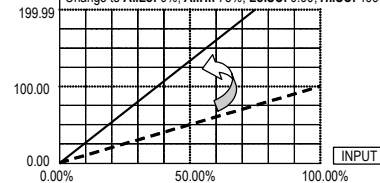
Data Hold & Reset



Scaling

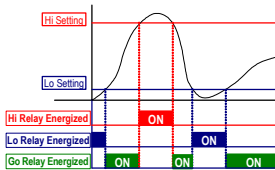
- Input range function: Ai.Lo: 0~100% of input
Ai.Hi: 0~100% of input
- Scaling function: Hi.SC(High scale): -19999~29999
Lo.SC(Low scale): -19999~29999

[SCALE] Default: Ai.Lo: 0%, Ai.Hi: 100%; Lo.SC: 0.00, Hi.SC: 100.00
Change to Ai.Lo: 0%, Ai.Hi: 75%; Lo.SC: 0.00, Hi.SC: 199.99

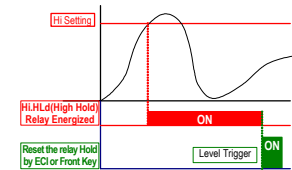


- Decimal point: Settable from 00000~0.0000
- **Control functions**
- Control relay: 2 Relays SPDT, 5A/230Vac, 10A/115V
2 Relays SPST, 1A/230Vac, 3A/115V
- Relay Output: Energized levels compare with set-points:
Hi / Lo / Hi.HLd / Lo.HLd / do / Go-1.2 / Go-2.3
DO function: Energized by RS485 command
Relay Energized Hold : Selectable Low or High Hold

Hi / Lo / Go Relay Energized

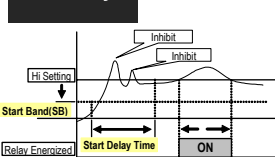


Hi(Lo) Energized Hold & Reset

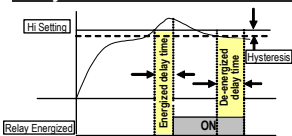


- Functions: Start delay / Energized & De-energized delay / Hysteresis
Start band: 0~9999 counts
Start delay time: 0:00.0~9(Minutes):59.9(Second)
Energized delay time: 9(Minutes):59.9(Second)
De-energized delay time: 9(Minutes):59.9(Second)
Hysteresis: 0~5000 counts

Start Delay



Energized / De-energized Delay & Hysteresis



External Control Input (ECI)

- 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

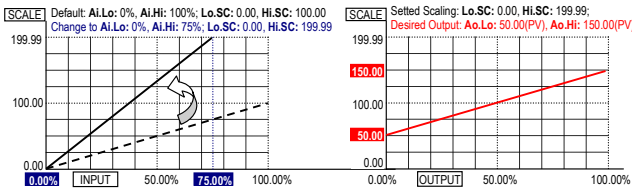
C2-01

PROCESS CONTROLLER

CS2-PR(1.3)

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: 1200/2400/4800/9600/19200/38400
Data bits: 7 or 8 bit
Parity: Even, odd or none (with 1 or 2 stop bit)
Device no: 1 ~ 255
Write to display value from PC's RS485 command
- Write function: Write to display value from PC's RS485 command

Power

- Excitation Supply: DC 24V/30mA maximum
- Power Supply: AC 115/230V $\pm 10\%$, 50/60Hz
Optional: DC20~56V
- 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)

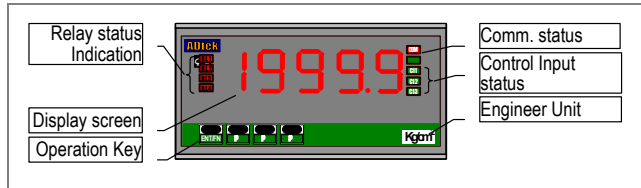
Electrical safety

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

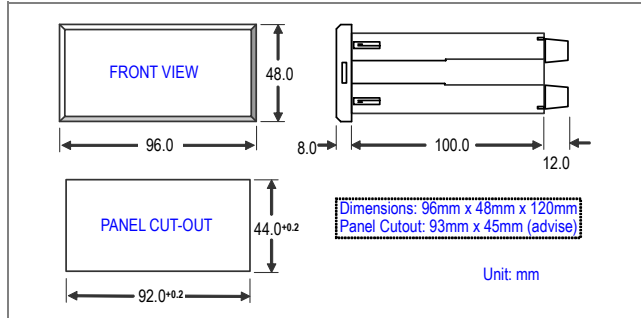
Mechanical

- 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

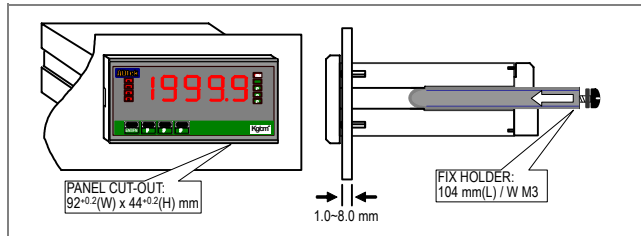
FRONT PANEL



DIMENSIONS



INSTALLATION



CONNECTION DIAGRAM

