

LINEARLY LINE SPEED / RPM INDICATOR

CS1-RL(1.0)

FEATURE

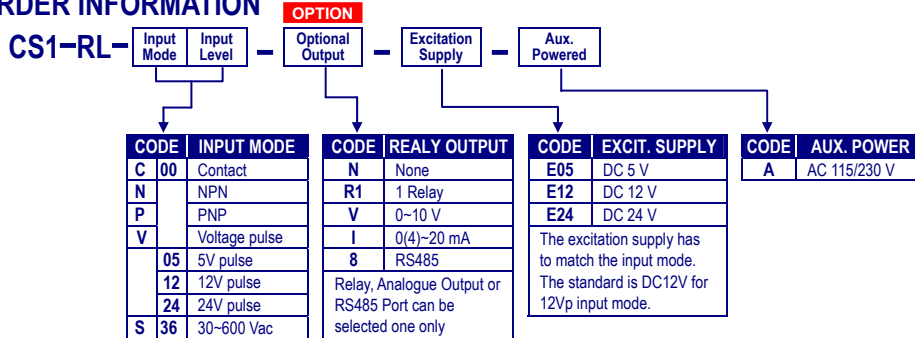
- Measuring Frequency **AUTO RANGE 0.001Hz~100KHz / ~140KHz(optional) /**
Contact, NPN, PNP, Voltage pulse
- Accuracy: $\pm 0.005\%$; Display range: 0~99999
- **Decimal Point auto moving according to input frequency**
- User function, easily programmed by the front panel
- **1 relay, 1 Analogue output or RS 485 communication port in option with flexible functions**
- CE Approved



The Newest

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ORDER INFORMATION



SPECIFICATION

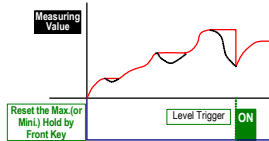
Input Frequency	Input Mode	Input Level
0.001Hz ~ 50Hz	Contact	
0.001Hz ~ 50 Hz 0.001Hz ~ 100KHz 0.001Hz ~ 140KHz (optional)	NPN	High Level: 8~12V; Low Level: 0.0~4.0 V (with excitation supply 12Vdc)
	PNP	
	Voltage Pulse	High Level: over 2/3 of input level Low Level: under 1/3 of input level
	Sine Wave	30~600Vp

➤ Input Mode can be selectable by dip switch of rear terminal block

- Calibration: Without calibration process.
- Accuracy: $\leq \pm 0.005\%$ of RDG $\pm 1C$;
- Sampling time: 10 cycles/sec ($\geq 10Hz$);
f cycles/sec ($\leq 10Hz$)
- 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
Up key: increase the number / back to previous
Down key: decrease the number / go to next function
Shift/Escape key: move the flash digit position /
Return back to upper level
Enter/Fun key: enter the parameters you set or function select
- Key control input: **Down key can be defined to be Relative PV / PV Hold / Maximum/Minimum reset / Reset for Relay Hold**
- 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
RS 485 communication: square orange LED
Max. / Mini. Hold / PV Hold / Rel. PV : square red LED
- Low Cut function: Low.cut : Settable range: -19999~+19999 counts
- Average function: AvG : Settable range: 1~99 times
- Digital Filter: D.FiLt : Settable range: 0(None)/1~99 times
- Reading functions**
- Input range: 0.001Hz ~ 100KHz
0.001Hz ~ 140KHz specify in option
- Resolution: Auto / Semi-Auto / Fix; 3 mode selectable
(Auto-Moving for d.p.)
Decimal point will Auto-changed according to input

- Compensation factor: Compensate error from 0.0001~9.9999
- 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

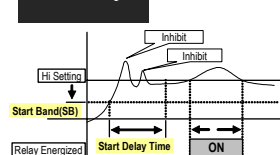
Max. (or Mini.) Hold & Reset



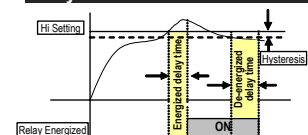
Control functions(optional)

- Control relay: 1 Relay SPDT, 5A/230Vac, 10A/115V
- Relay Output: Energized levels compare with set-points:
Hi / Lo / Hi hold / Lo hold energize selectable
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
- Functions:

Start Delay



Energized / De-energized Delay & Hysteresis



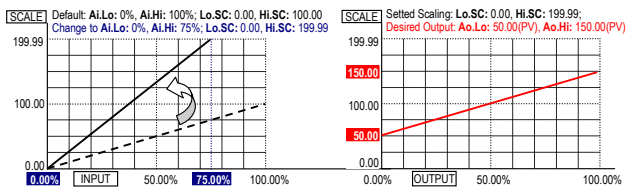
Analogue output(option)

- Accuracy: $\leq \pm 0.2\%$ of F.S.;
- 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: $\geq 1K\Omega$;**
Current: 0(4)~20mA: $\leq 600\Omega$
- Functions: **Auto.Hi(output high): PV Hi vs. output range Hi**
Auto.Lo(output range Low): PV Lo vs. output range Lo

C1-11

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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

- Excitation Supply: DC 5V/12V/24V, 30mA
- Power Supply: AC 115/230V ± 10%, 50/60Hz
- Power consumption: 5VA
- Back up memory: By EEPROM

Environmental

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

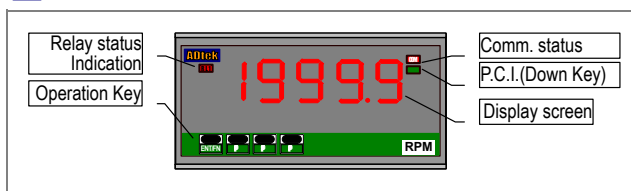
Electrical safety

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

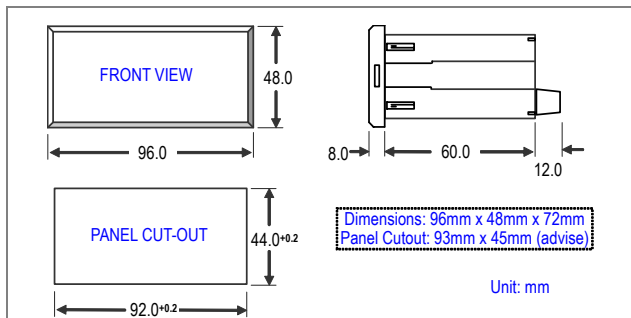
Mechanical

- Dimensions: 96mm(W) x 48mm(H) x 72mm(D)
- Panel cutout: 92mm(W) x 44mm(H)
- Case Material: 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: About 350g

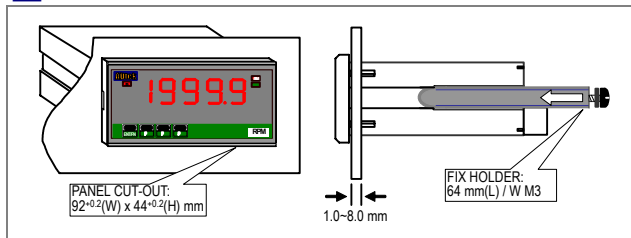
FRONT PANEL



DIMENSIONS



INSTALLATION



CONNECTION DIAGRAM

