

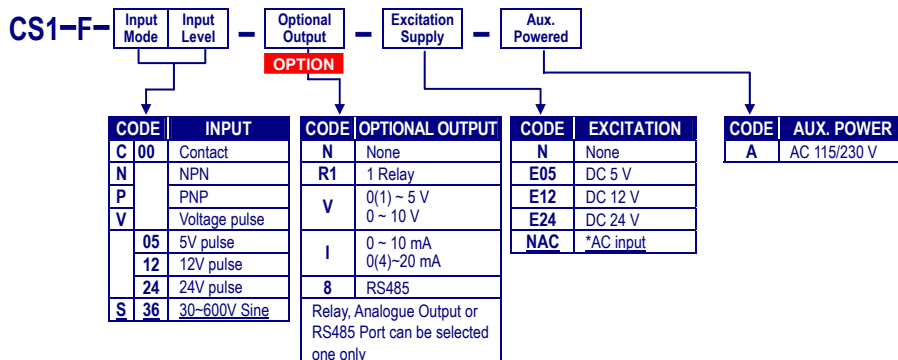
FEATURE

- Measuring Frequency **AUTO RANGE 0.01Hz~100KHz / ~140KHz(optional)** / Contact, NPN, PNP, Voltage pulse, 30~600V sine wave
- 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

ORDERING INFORMATION



SPECIFICATION

Input Frequency	Input Mode	Input Level
0.01~50 Hz	Contact	
0.01~50 Hz 0.01 Hz~100 KHz 0.01 Hz~140 KHz (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	30~600Vac

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

- Calibration: Without calibration process.
- Accuracy: $\leq \pm 0.005\%$ of FS $\pm 1C$;
- 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
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(K.C.I.): **Down key can be defined to be Relative PV / PV Hold / Maximum/Minimum reset / Reset for Relay Latch**

- 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: 0.8" red high-brightness LED
Relay output indication: 1 square red LED
RS 485 communication: 1 square orange LED
Down key function indication (Max. or Mini. Hold / PV Hold / Rel. PV / ...): 1 square green LED

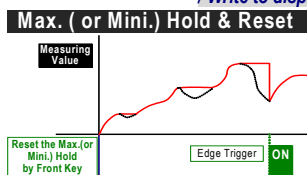
- Low Cut function: Low.cut : Settable range: -19999~19999 counts
- Average function: AvG : Settable range: 1~99 times
- Moving Average function: M.AVG : Settable range: 0(None)/1~10 times
- Digital Filter function: D.FiLt : Settable range: 0(None)/1~99 times

Reading functions

- Input range: 0.01Hz~100KHz; **0.01Hz~140KHz specify in option**
- Resolution: **Auto / Semi-Auto / Fix; 3 mode selectable**

(Auto-Moving for d.p.)

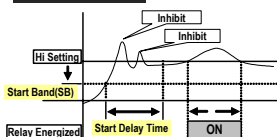
- Compensation factor: Compensate error from 0.001~9.999
- Over range indication: ovFL, when input is over 120% of input range Hi
- Display functions: Present Value / Maximum Hold / Minimum Hold / Write to display by RS485 command



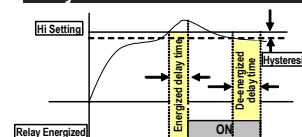
Control functions(optional)

- Control relay: 1 Relay SPDT, 5A/230Vac, 10A/115V
- Relay Output: Energized levels compare with set-points:
Hi / Lo / Hi Latch / Lo Latch energize selectable
Start delay / Energized & De-energized delay / Hysteresis
Start band: 0~19999 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: 0~19999 counts

Start Delay

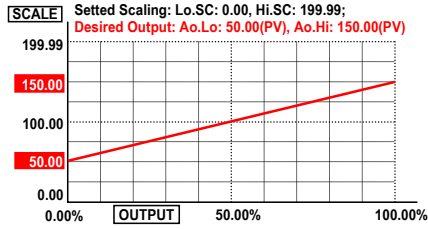


Energized / De-energized Delay & Hysteresis



Analogue output(option)

- Accuracy: $\leq \pm 0.1\%$ 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: $\geq 1.0K\Omega$;**
Current: 0(4)~20mA: $\leq 600\Omega$ max
- Functions: **Ao.Hi(output range high): PV Hi vs. output range Hi**
Ao.Lo(output range Low): PV Low vs. output range Lo



RS 485 communication(optional)

- Protocol: Modbus RTU mode
- Baud rate: Selectable 1200/2400/4800/9600/19200/38400
- 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 ± 15%, 50/60Hz
- Power consumption: 5VA
- 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)

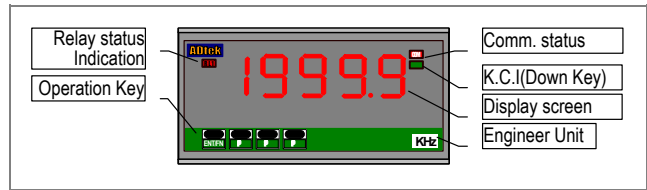
Electrical safety

- Dielectric Strength: AC 2.0 KV for 1 min
Between Power / Input / Output / Case
- Insulation resistance: ≥ 100M ohm at 500Vdc
- Isolation: Between Power / Input / Output
- EMC: EN 55011:2002; EN 61326:2003
- Safety(LVD): EN 61010-1:2001

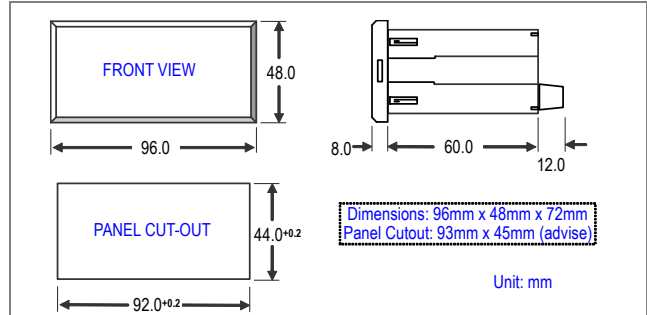
Mechanical

- Dimensions: 96mm(W) x 48mm(H) x 72mm(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: About 350g

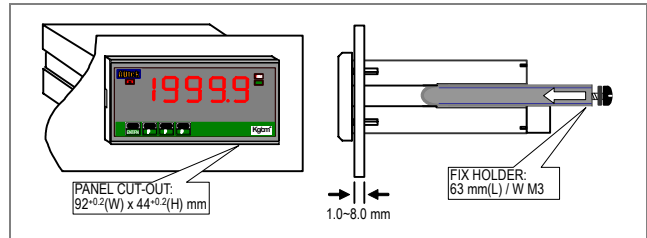
FRONT PANEL



DIMENSIONS



INSTALLATION



CONNECTION DIAGRAM

