



TECHNICAL GUIDANCE

Capable of seeing instantaneous/totalized flow rates simultaneously

IR-6000 Series

MINI UNIVERSAL TOTALIZER

GENERAL

IR-6000 is a panel mount Indicator / Totalizer which is used in combination with flowmeters having 4 to 20 mA DC or pulse output for flow rate.

IR-6000 has simultaneous indication of flow rate and totalization of flow, and also has a function of 2 points flow rate alarm monitoring.

Moreover, IR-61□□ has a function of square root, and the pressure signal from difference pressure transmitters can also be handled.

Scaling, alarm setting and other operation parameter setting can be conducted through front panel key operation.

IR-6000 has an integrated 24 V DC loop power supply to eliminate the necessity of external power supply unit.

IR-6000 saves panel space by its DIN48x48 compact housing and also eliminates troublesome wiring.



STANDARD SPECIFICATION

INPUT

◆ IR-60□□

Response frequency: 0.01 to 1000Hz

Full scale setting: 0.1 to 1000Hz (0.1Hz step)

- Open collector pulse
- Terminal open voltage: 18 V
- Terminal short-circuit current: 7 mA
- Active voltage pulse
- L: 0 to 2 V, H: 3.6 to 30 V DC

◆ IR-61□□

- 4 to 20 mA DC, Load 250 Ω
- 1 to 5 V DC or 0 to 5 V DC (Option)

INDICATION

◆ Flow rate indication

- Indication : 4 digit LED (Upper: 7 mm height, Red)
- Accuracy : For open collector or active voltage pulse input (IR-60□□) ±0.05% F.S.±1 digit (23°C±5°C)
For analog current or square signal input (IR-61□□) ±0.3% F.S.±1 digit (23°C±5°C)
- Scaling : Freely - programmable (Front panel)
- Decimal point : Freely -programmable (0 to 3 digit)
- Low cut-off : 0 to 29% (1% step) Freely - programmable
- Sampling speed : 0.1 to 99.9 s(0.1s step) Freely - programmable

◆ Totalizing count indication

- Indication : 5 digit LED (Lower: 7 mm height, Green)
- Accuracy : For open collector or active voltage pulse input (IR-60□□) ±0.05% F.S. (23°C±5°C)
For analog current or square signal input (IR-61□□) ±0.3% F.S. (23°C±5°C)
- Scaling factor : 1 to 180000 c/h Freely - programmable
- Low cut-off : 0 to 19% Freely -programmable
- Totalizing count reset : •Key operation (Front panel)
•Short circuiting of rear terminal

FLOW RATE ALARM / PRESET COUNTING FUNCTION

(Alternative choice)

- No. of points : 2 points
- Setting : Through inside front panel key
- Contact capacity : 140 V AC / 30 V DC, 50 mA (Max)
PhotoMOS relay
- Reset : •Key operation (Front panel)
•Short circuiting of rear terminal
- Relay action : 1 shot or Hold output

OUTPUT FUNCTION

- ◆ Analog current output : 4 to 20 mA DC (Max load 500 Ω)
Accuracy : ±0.3% F.S. to display (23°C±5°C)
- ◆ Scaled pulse output : Synchronized to totalization counter
Open collector, Rating DC30V, 50mA (Max)
Pulse width : 0.01 to 2s (0.01s step)

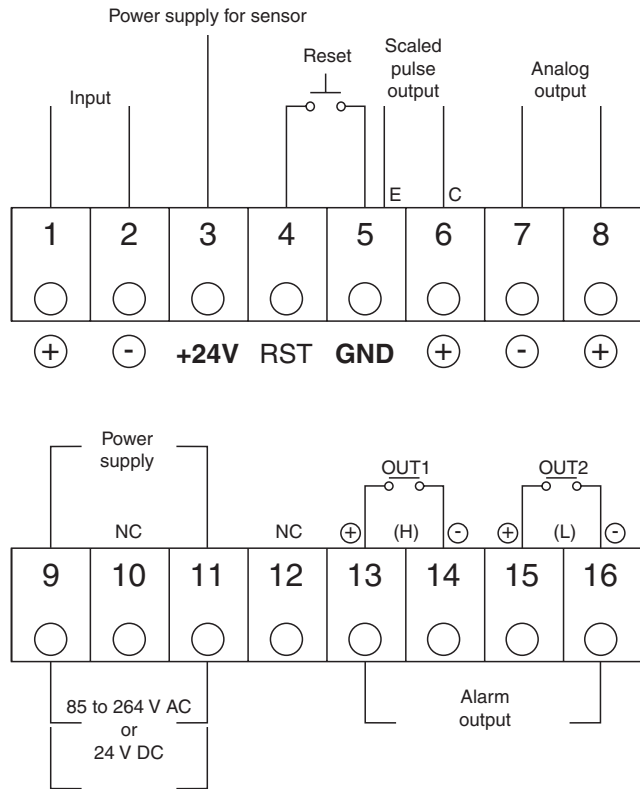
OTHERS

- Power supply : (1) 24 V DC±15%
(2) 85 to 264 V AC, 50/60Hz
- Sensor loop power supply : 24 V DC, 30 mA Max (Stabilization)
- Withstand voltage : 1500 V AC (1min.)
- Insulation resistance : 500 V DC, 10 M Ω (Min.)
- Installation : Panel mount
- Consumption : 17 VA DC / 7 W DC approximately
- AMB. condition : 0 to 50°C, 30 to 80%RH
(To be free from condensation)
- Enclosure : For indoor use type (Equivalent to IP20)
- Housing material : ABS resin
- Data back-up : Retaining each set value and integrated data in FRAM
(100,000 times or less for about 10 years)
- External wiring connections : Screwless terminal
Available cable: AWG 20 to 22
0.3 to 0.75 mm²
- Mass : Approx. 150g

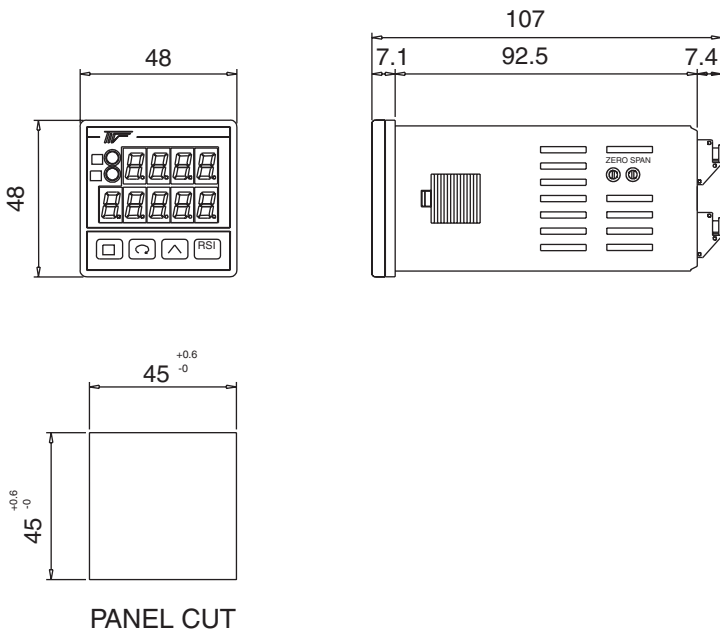
MODEL CODE

Model		Description
IR-	6	
Input	0	Pulse input
	1	Analog input
Input signal	0	Open collector pulse
	1	Active voltage pulse
	2	4 to 20 mA DC
	3	1 to 5 V DC
	4	0 to 5 V DC
Sensor loop power supply	0	24 V DC / 30 mA Max
	1	Others
Power supply	-1	24 V DC \pm 10%
	-2	85 to 264 V AC
Alarm function	0	No use
	1	Flow rate alarm output (2 points)
	2	Totalizing preset output (2 points)

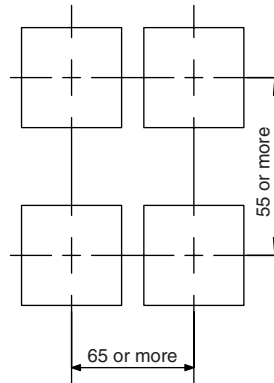
TERMINAL



DIMENSION



Dimensional drawing for mounting distance



* Specification is subject to change without notice.

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