

OUTLINE

IR1600 is an indicating totalizer. Connecting with flowmeters having pulse output, it indicates alternatively instantaneous or totalizing flow rate with alarm output. Scaling, alarm setting and other parameters can be set through a key operation on front panel. Supplying built-in power of 12V DC for sensor, it receives 3-wire pulse signals. IR1600 compact housing of DIN48 x 24 is just the right size for your space saving control panel.

STANDARD SPECIFICATION

● INPUT

- Pulse input (receives pulse output sensor)
 - Full scale setting 1 to 1000 Hz
- NPN Open collector or dry contact pulse
 - Voltage at open terminals : 10.5V
 - Current at short circuit : 5.5mA
- Active voltage pulse
 - L: 0 to 2 V DC H: 3.8 to 30 V DC
- External input
 - To receive NPN open collector output or dry contact output. Select following functions.
 - Reset input : Totalizing count or alarm is reset by ON input.
 - Inhibit input : Sensor input is inhibited by ON input (Input becomes 0 compulsorily)
 - Hold input : Indication is kept hold by ON input.

● INDICATION (Instantaneous or totalizing flow is selected by key operation)

- Indicator
 - Red 5 digit LED, height 7mm, width 5mm
- Instantaneous flow rate indication
 - Indication Max. 4 digits LED (decimal point changeable)
 - Accuracy $\pm 0.05\%$ F.S. ± 1 digit (* 1)
 - Scaling 0.001 to 9999
 - Low cut-off 0 to 29% variable
 - Renewal indication period 0.1 to 99.9 sec.
- Totalizing count indication
 - Indication Max. 5 digits LED (decimal point changeable)
 - Accuracy $\pm 0.05\%$ F.S. (* 1)
 - Scale factor 1 to 180000 count/h
 - Low cut-off Same setting applied as the one of flow rate
 - Totalizing count reset by key operation or reset input
 - Over scale Selectable either of followings
 - Stop totalizing with flickering indicating digit
 - Continue totalizing endlessly
 - Continue totalizing with shifting (indicated as x 10)
- Instantaneous and totalizing count indication when abnormal input is received.
 - The last digit flickers if input signal exceeds 150% F.S.
- 3 LED status lamps on the front panel
 - 1 ● (red) : ON at alarm output OUT1 is ON
 - 2 ● (red) : ON at alarm output OUT2 is ON
 - T ● (green) : ON at totalizing count indication



● FLOW RATE ALARM/PRESET COUNTING

- Either flow rate alarm or preset counting is selectable. Duplicated use is not allowed.
- No. of outputs 2 points (Alarm lamp ON)
- Output signals NPN open collector, 30V DC. Max. 50mA
- Operation mode Comparison/Hold/1shot selectable
- Reset by key operation or external reset input

● OUTPUT FUNCTION

- Pulse output (Synchronized pulse with totalizing pulse)
 - One pulse is transmitted each time the counter counts up.
 - OUT1 output terminal used (common use with alarm is not allowed)
 - Pulse width 0.01 to 1.99s (default 50ms)
- Current output as option (4 to 20mA DC)
 - Transmits flow rate in rescaled current signal.
 - Accuracy $\pm 0.2\%$ of the indication (* 1)
 - Renewal period approx. 20ms
 - Resolution Max. 1.6 μ A

● GENERAL SPECIFICATION

- Power supply 24V DC $\pm 10\%$
- Consumption Max. 3W without current output
Max. 7W with current output
- Sensor power supply 12VDC, 50mA
- Ambient cond. 0 to 50°C, 30 to 80 %RH No condensation
- Case material, color ABS resin, off-white
- Enclosure Case: IP20 eq. (indoor use)
Front: IP66 eq. (dust and water proof)
- Cable termination Plug-in type screw terminal
- Wire size AWG26 to 16
0.14 to 1.25mm²
- Mass approx. 50g

● OTHER SPECIFICATIONS

- Withstand voltage 1000V AC, 1min. (* 2)
- Insulation resistance 500V DC, 50MW or more (* 2)
- Data back-up The setting values and totalized values are memorized in FRAM, in less than 100000 times for about 10 years.

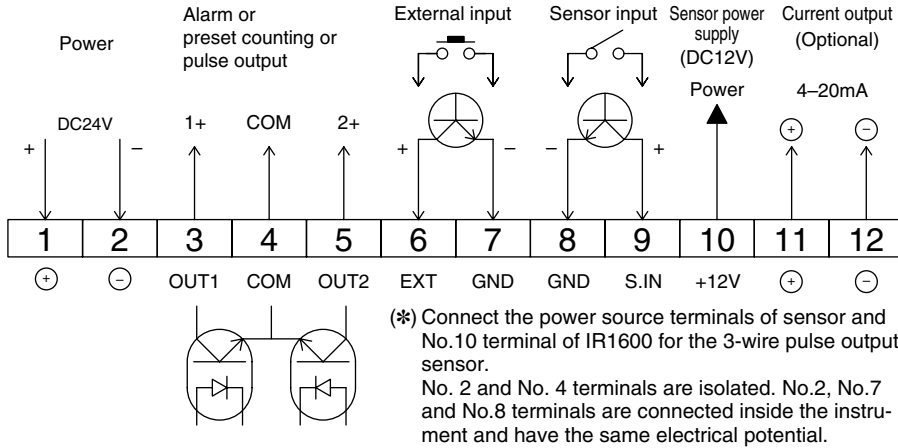
(* 1) At the conditions of 23°C measurement and less than 100ppm/°C temperature drift

(* 2) Between OUT1 and OUT2 output terminals

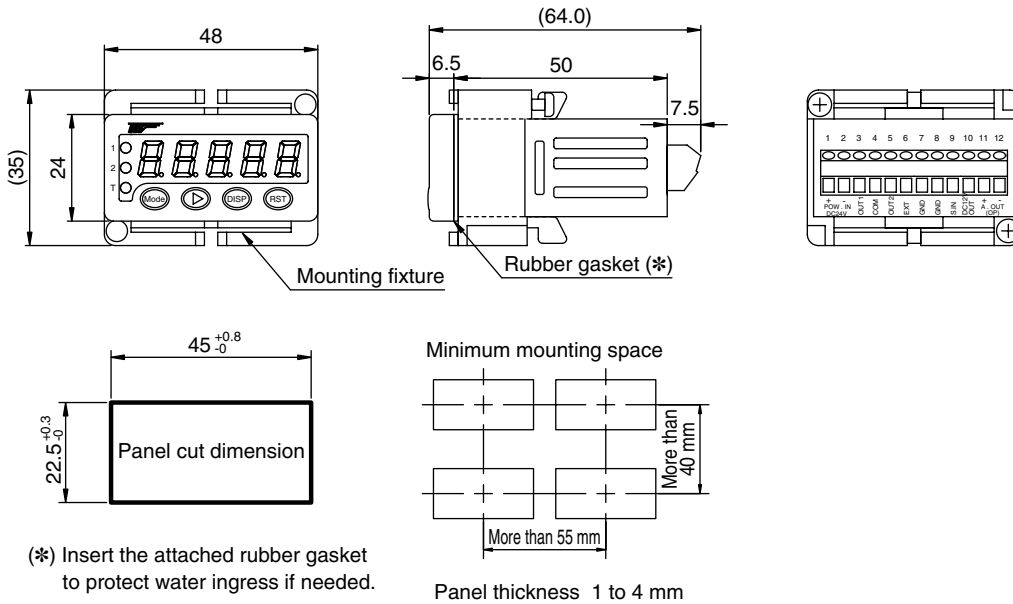
MODEL CODE

Model code				Description
IR	1	6		
Current output	0			None (Standard)
	1			Yes (Option)
Input signal	0			Open collector pulse
	1			Voltage pulse

TERMINAL



DIMENSIONS



* Specification is subject to change without notice.

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