

DIGITAL PANEL RECORDER

**core 1001**

core1001-B-00A Digital Panel Recorder Totalizer Type

The Digital Panel Recorder Totalizer Type is a new concept product adopting a "Recording" function in conventional totalizer. It can display accumulated total value and instantaneous flowrate per hour and per minute and output compensated pulse with a single unit.

**NEW**

**Totalizer to become a recorder**

## Cost Reduction in Remote Measurement

Accumulated total value and instantaneous flowrate are recorded in the attached microSD card.

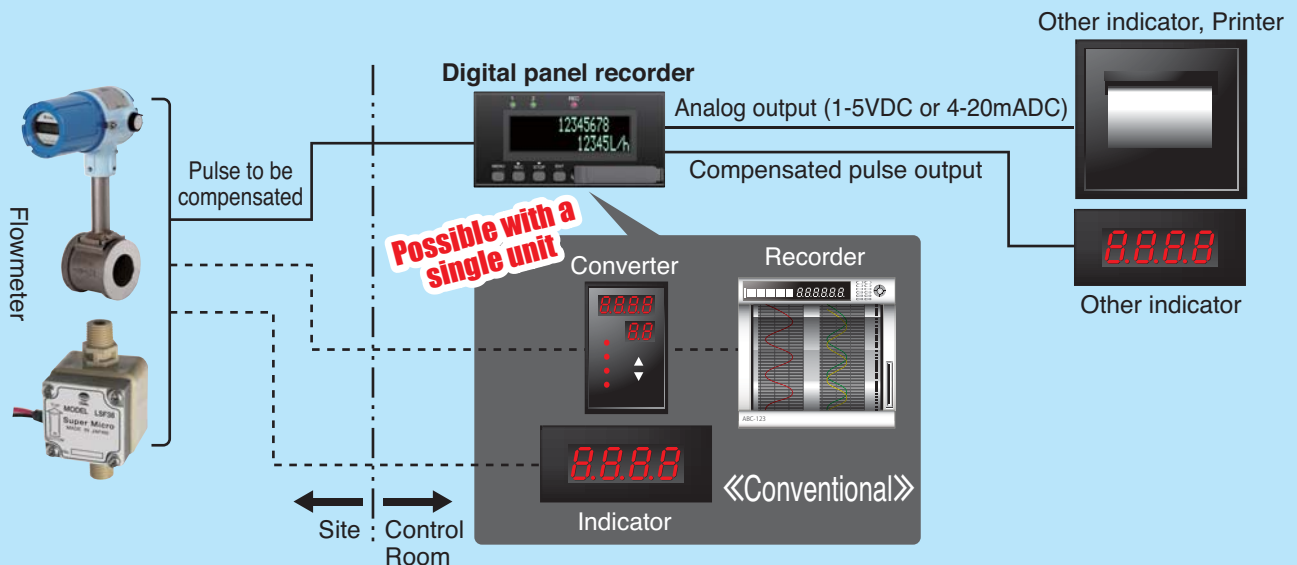
The recorded data is saved in CSV format at intervals of 0.1s max.

A single unit can act as a relay device with other peripheral devices in remote measurement.

● **Pulse signals that can be input from a flowmeter are as follows:**

(1) Contact pulse, open collector pulse (2) Voltage pulse (3) 2-wired current pulse

From the input pulse signals, accumulated total value, reset total value, and instantaneous flowrate per hour and per minute can be displayed.



● **Pulse output and analog output functions are utilized for output to other indicator or the like.**

This digital panel recorder converts a pulse train received from a flowmeter and outputs compensated pulses in a unit convenient for control by the user.

The recorder provides Instantaneous flowrate as analog outputs of 1-5 [V] or 4-20 [mA]. It can also be connected to other indicator.

● **Connection to alarm, indicator light, etc. is possible.**

External alarm signals are classified into two signals, Alarm 1 and Alarm 2. Upper and lower limits and contact output direction (N.O or N.C) can be set individually.

● **Start and end of recording can be controlled from outside.**

Start and end of recording can be controlled remotely with external trigger input signals.

**Recorded data**



Can be used for recording the amount of water supply and drainage in a factory, for visualizing the amount of used fluids for energy saving, or for use as data for daily and monthly reporting.

# Specifications

Model	core1001-B-00-A		
Display	Display method	Fluorescent display tube	
	Display item	Rotation display with ENT key (1) 8-digit accumulated total value (2) 8-digit accumulated total value and reset total value (3) 8-digit accumulated total value and bar graph (4) 8-digit accumulated total value and 5-digit instantaneous flowrate (5) 5-digit instantaneous flowrate (6) 5-digit instantaneous flowrate and bar graph (7) Time	
Recording function	Instantaneous flowrate and totalized value are saved to microSD card in CSV format.		
Sampling of recording	0.1/0.2/0.5/1/2/5/10/15/20/30sec. 1/2/5/10/15/20/30/60min		
Input signal	Generator power supply	13.5VDC ( $\pm 10\%$ ) 50mA with overcurrent protection 24VDC ( $\pm 10\%$ ) 50mA with overcurrent protection	
	Response pulse	200Hz (traceable up to 2.3kHz): Standard	
Output signal	Pulse output	Selection	After compensation: Standard or to be compensated (Input synchronization, 170 $\mu$ s)
		Output signal	Open collector after opto-isolation
		Capacity	30VDC 50mA max.
		Voltage at ON	15VDC max.
		Pulse width	0.2 to 999ms
	Analog output	Resolution	D/A conversion system, 14 bit
		Output signal	4 to 20mA DC 1 to 5VDC
		Load resistance	600 $\Omega$ max.
		Accuracy	$\pm 0.1\%$ F.S
	Upper/Lower limit alarm	Time constant	2.5 s
		Output signal	Photo MOS-FET x2
Capacity		400V 200mA	
	ON resistance	10 $\Omega$ max., Leakage current 1 $\mu$ A min. at OFF	
Ambient temperature	-10°C to 50°C		
Insulation resistance	50M $\Omega$ min. between input terminals and FG (at 500VDC mega)		
Withstanding voltage	1500VAC/10mA for 1 min between power terminals and FG 500VAC/10mA for 1 min between input terminals and FG		
Power consumption	85 to 264VAC, 50/60Hz, 18VA		
Weight	Approx. 500 g (including packing)		
External dimensions	96 (W) x 48 (H) x 144 (D) mm (excluding extrusions)		

\*1: Instruction Manual and Warranty Certificate of microSD card are supplied as accessories for microSD card.

## Application Example: Energy-saving management

Flowmeter

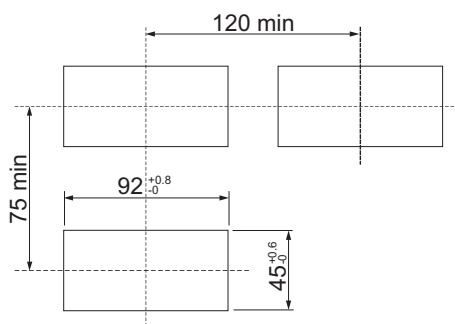
Recording of totalized value and instantaneous flowrate

Digital Panel Recorder

Data of flow measurement can be recorded/monitored by the combination of digital panel recorder and flowmeter.

The amount of water supply and drainage in a factory can be recorded in the microSD card and the data can be used for daily and monthly reporting.

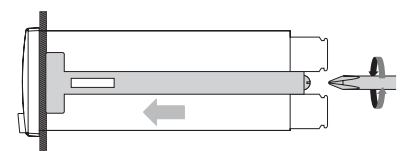
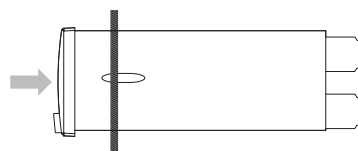
## Panel Processing



## Mounting

★ Insert Digital Panel Recorder into the mounting hole of the panel processed.

★ Apply the installation fixtures to both sides of the case and fix them to the panel with screws.



- Install the digital panel recorder horizontally.
- Fix the recorder to a panel of 1 to 8mm thick.
- Appropriate tightening torque for fixing screws: 0.3  $\pm$  0.05N $\cdot$ m
- Do not apply excessive force when tightening screws. Otherwise, deformation may occur in the case or installation fixtures.



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