

SPECIFICATIONS

Digital Indicator

1. General

The instrument is a Low cost type digital indicator for strain gage applied transducer, and its panel sizes 96 mm×48 mm.

2. Specifications

2-1. Specifications for analog section

- Bridge power supply DC5 V ± 0.25 V within 60 mA
- Applicable transducers Up to 4 pieces of strain gage applied transducers (350 Ω) are connectable.
- Input range F.S. setting is available with the input range from 0.4 mV/V to 3.1 mV/V.
- Output range DC2 V, Load resistance is 5 kΩ or more.
(F.S. setting is available by function)
- Output rate 4 times/s or 20 times/s changeable (Synchronous with display rate)
- Output resolution Approx. 1/10 000
- Zero adjustment range -0.3 mV/V to 2.4 mV/V
- Non-linearity
 - Display 0.05 %F.S.
 - Output 0.1 %F.S.
- Temperature coefficient
 - Zero ± 1 μV/°C
(Input conversion, During F.S. setting at the input from 0.5 mV/V to 3.1 mV/V)
 - Sensitivity ± 0.02 %F.S./°C
(Input conversion, During F.S. setting at the input from 0.5 mV/V to 3.1 mV/V)
- Input noise ± 1 μVp-p or less
(At the default setting of the digital filter and the stabilized filter)
- Input filter 1 Hz
(At the "0" setting of the digital filter and the stabilized filter)
- A/D sampling 20 times/s

2-2. Specification for digital section

- Load display
 - Display range -9 999 to 99 999
 - Display increment 1 (changeable to 2, 5 or 10)
 - Display Red 7 segments LED, with 17 mm character's height
 - Over display "-OL" display when minus over and "OL" display when plus over.
- Condition display HOLD and PEAK,
- Judgement display S1, S2
- Display rate 4 times/s (20 times/s changeable)
- Decimal point display No display, 10¹, 10², 10³ or 10⁴ changeable

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Spec. No. EN382702-H

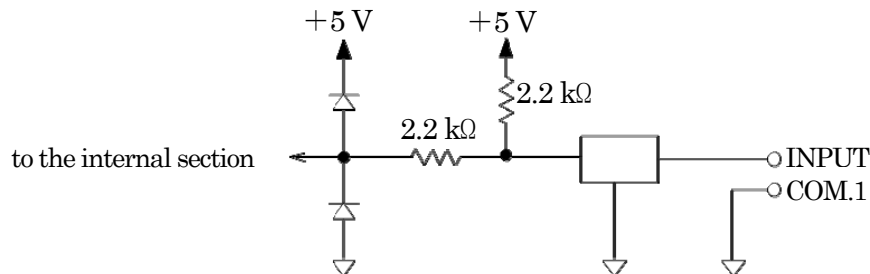
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2-3. Front panel sheet key function

FUNC.	Change of function mode
S1/◀	S1 set value display/Carry up the set value
S2/▲/ZERO	S2 set value display/Increment of the set value/Zero set with pressing shift key together at the same time.
PEAK/TRACK	Change of Track and Peak hold
RESET	Reset of peak value During ON, display is fixed as 0.
ENTER/SHIFT	Enter key/Shift key

2-4. External control function

- ZERO Same as the S2/▲/ZERO key
※Above is pulse input, and effective once when the pulse width is 100 ms or more.
- PEAK/TRACK/A/Z Change of Track and Peak hold
Open : Track
Short : Peak hold
- HOLD Hold of display, comparative output and analog output
- RESET/A/Z OFF Same as the RESET key, reset condition is made by short
※Above are level input, effective during inputting by short at 100 ms or more.



2-5. Comparator function

- Set value -99 999 to 99 999
- Number of sets 2 points of S1 and S2
- Hysteresis data set value 0 to 99 digits
- Hysteresis time width setting 0 to 9.9 s
- Direction of hysteresis Selectable whichever “ON delay” or “OFF delay”.
- Conversion times of comparator 4 times/s or 20 times/s changeable (Synchronous with display rate)
※During the display of set value, the measurement process and comparator process is interrupted.

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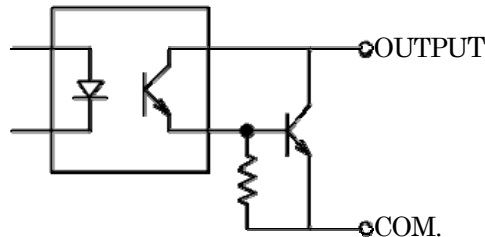
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2-6. Open collector output signal

- S1 and S2 Operates when reached under or over the comparator set value
- Specifications for open collector
 $V_{CE} = DC30\text{ V}$, $I_C = 30\text{ mA MAX}$

Equivalent circuit at open collector output section



2-7. Various kinds of functions

- Digital filter The data is stabilized through software in CPU.
- Stabilized filter The digital filter is reinforced and stabilized only when the variable width of the load is in the constant value.
- Change of HOLD target The target of Hold can be made by the combination with “Display”, “Comparative output” and “Analog output”
- Sheet key lock Prohibits operation of optional key function
- Peak hold Hold the maximum value of load
- Changeover the analog output target
 Changeable the analog output target whichever “Track value” or “Display interlock”

3. Overall specifications

- Operating temperature/humidity range
 - Temperature $-10\text{ }^{\circ}\text{C}$ to $50\text{ }^{\circ}\text{C}$
 - Humidity 85 %RH or less (Non-condensing)
- Power supply
 - Power supply voltage AC100 V (AC90 V to AC121 V)
 - Power supply frequency 50/60 Hz
 - Power consumption Approx. 2.2 VA (At AC100 V without options.)
- Outline dimensions (W × H × D)
 96 mm × 48 mm × 120 mm (Excluding protrusion.)
- Dustproof waterproof specification
 During the panel mount is installed, the front panel section becomes IP 65 or equivalent. (When the attached panel mounting gasket is installed.)
- Weight
 Approx. 0.3 kg (without options)

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4. Standard specifications at the shipment

- Bridge power supply DC5 V
- Span adjustment 2 000 display at the input of 0.5 mV/V
- The minimum scale 1
- Analog output Output of 0 V to 5.000 V with 0 to 2 000 display
- Power supply
 - Power supply voltage AC100 V (AC90 V to AC121 V)
 - Power supply frequency 50/60 Hz

5. Accessories

- Instruction manual 1 piece
- Midget fuse 1 piece (0.3 A at AC100 V power supply voltage (Standard))
(0.3 A at AC200 V power supply voltage (CSD702-P63))
(2 A at DC12 V power supply voltage (CSD702-P66))
(2 A at DC24 V power supply voltage (CSD702-P67))
- Unit seal 1 piece
- Panel mounting attachment 2 pieces
- Panel mounting gasket 1 piece

6. Options

6-1. Power supply voltage

- P/N : CSD701B-P63 AC200 V (AC180 V to AC242 V) 50/60 Hz
Power consumption Approx. 2.2 VA (at AC200 V)
- P/N : CSD702-P66 DC12 V (DC10 V to DC15 V)
Power consumption Approx. 1.2 W (at DC12 V)
- P/N : CSD702-P67 DC24 V (DC20 V to DC30 V)
Power consumption Approx. 1.2 W (at DC24 V)

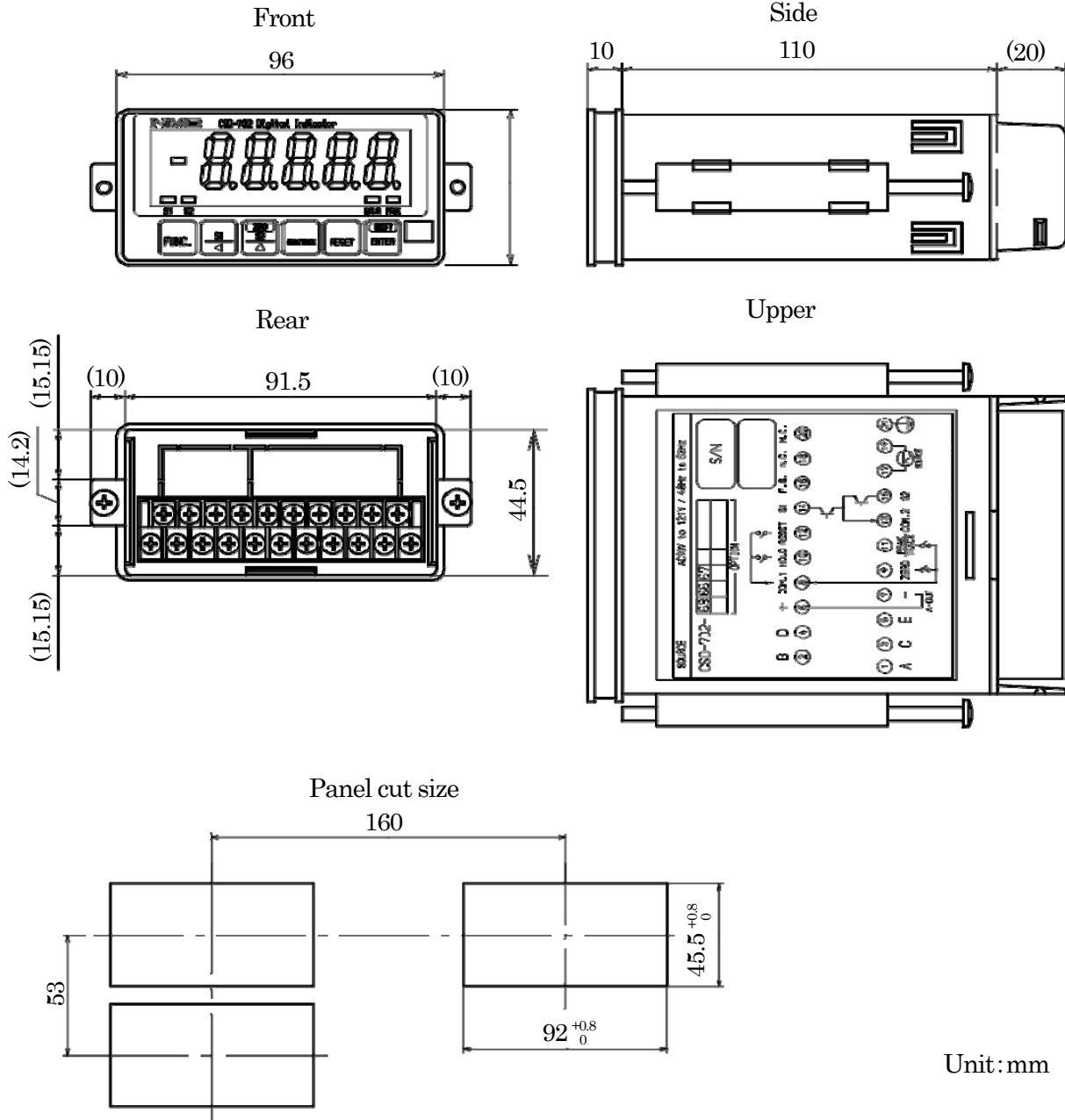
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7. Outline dimensions



Unit: mm

※ Specifications and outline dimensions and so on which have printed may subject to change for the purpose of improvement without notice.