

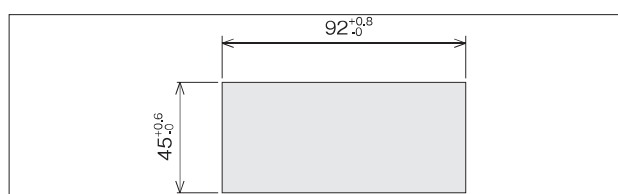
TD-91B (for instrumentation) /TD-91BB (desktop type)

- Compact and lightweight
- Equipped with analog peak hold function and upper / lower limit setting function
- Wide balancing range
- Easy operation with jog dial
- Direct reading and display of physical quantities possible by equivalent input calibration
- Eye-friendly monitor with wide viewing angle
- Equipped with voltage / current outputs
- Panel mount (TD-91BB: Desktop type)



Instrumentation
TD-91B

Panel cut drawing



Desktop type
TD-91BB



This equipment is an instrumentation digital indicator to measure loads, displacements, and pressures using strain gauge type transducers. Equipped with an LED display with character height of about 20 mm and a jog dial, achieving an indicator with excellent operability. Equivalent input calibration and actual load calibration allow easy setting of input range and physical quantity display. In addition, the upper and lower limits and the measured value are compared to output the result as an open collector signal. The TD-91B is a panel mount type and the TD-91BB is a tabletop type.

Specifications

Measurement part	
Number of measuring points	1 point
Bridge excitation	DC 5 V± 5% 60 mA
Applicable sensor range	120 Ω, 350 Ω, 350 Ω sensor x 4
Zero adjustment range	-3 mV/V to +3 mV/V
Measurement range	-3 mV/V to +3 mV/V
Accuracy	SPAN/SPIN × 0.1% + 1 digit When directly reading strain ±3 digits
Sampling speed	About 2.5 times/second
Calibration value	0.5 mV/V 1.5 mV/V 2.0 mV/V
Stability	0.4 × 10 ⁻⁶ strain/C° in input conversion
Display	
Display	Red/green 7-segment LED (Character height: About 20 mm)
Display value	-9999 to +9999 (4 digits)
Decimal point	Arbitrary setting possible
Digital filter	400, 800, 1000, 2000, 5000 times moving average
Hold function	(1) Peak hold (2) Valley hold (3) Peak-valley hold (4) Start hold (5) Analog peak hold (6) Analog/digital peak hold
Comparison output part	
Comparison judgment value range	-9999 to +9999
Output circuit	Open collector output by photocoupler
Photocoupler output capacity	DC 30 V 20 mA
Comparison function	External output
	Upper limit setting HI
	Upper limit or less, lower limit or more GO
	Lower limit setting LO
*Comparison external output is only available for TD-91B.	
Analog peak hold	
Response speed	Minimum input width: 2 ms
Droop speed	0.025% FS/s (1.5 × 10 ⁻⁶ strain/s)
Accuracy	± 0.5% FS

Reset control time	800 ms or more
Analog output part	
Response speed	Approx. 0.5 seconds
S/N ratio	26 dB or more (50 mVp-p)
Accuracy	± 0.5% FS
Output	Voltage output: 0 to 1 V (10 kΩ load or more) 0 to 10 V (10 kΩ load or more) 1 to 5 V (10 kΩ load or more)
	Current output: 4 to 20 mA (550 Ω load or less) *The TD-91BB can only output voltage.
External control part	Start hold terminal
	Analog peak hold terminal
	Digital peak hold terminal
	Digital zero terminal
	Relay reset terminal
* The external control terminal is only available for TD-91B. * The TD-91BB has the analog peak hold control switch only.	
General specifications	
Operating temperature / humidity range	-10C° to +50C° 35% to 85% RH or less (No condensation)
Power supply	
AC power supply	AC 100 to 240 V 50/60 Hz
Rated voltage	AC 90 to 240 V 50/60 Hz
Allowable voltage	13 VA max
Maximum power consumption	
Warm-up time	30 minutes
Outside dimension	TD-91B 48: 48 (H) x 96 (W) x 99.5 (D) mm (Excluding protrusions)
	TD-91BB: 81 (H) x 170.5 (W) x 120 (D) mm (Excluding protrusions)
Mass	TD-91B: Approx. 450 g
	TD-91BB: Approx. 1.6 kg

Standard accessories

Instruction Manual	1
Warranty certificate	1
AC power cable (CR-05A)	1 (TD-91B only)
Crimp terminal (TMEV1.25-3S)	12 (TD-91B only)
Output cable (CR-30)	1 (TD-91BB only)
Unit sticker	1

* Specify plug type when ordering TD-91BB