

Narrow margin (ΔTR) measurement for all resistance value of rheostat



- Contact check function built-in
- All resistance value (ΔTR) Can be measured by deviation value [$\pm 99.9\%$]
- Possible to measure of "intensive contact resistance" (R_c) [19.9%]
- The "NOISE VALUE" can be measured by the AC/DC mode.
- AC noise (ENR) (Peak hold)
- DC noise (CRV) (Peak hold)
- The measurement of R_c and noise can select ON/OFF

Specifications

ΔTR Measurement

Range	Measuring range (STD setting range)	Measuring current	Measuring voltage	Accuracy
100 Ω	10 Ω ~ 99 Ω	10mA ~ 100mA	1 ~ 10V	$\pm 0.2\% \pm 1$ digit
1k Ω	100 Ω ~ 990 Ω	5mA ~ 50mA		
10k Ω	1k Ω ~ 9.9k Ω	0.5mA ~ 5mA		
100k Ω	10k Ω ~ 99k Ω	50 μA ~ 0.5mA		
1M Ω	100k Ω ~ 990k Ω	5 μA ~ 50 μA		
10M Ω	1M Ω ~ 10M Ω	0.5 μA ~ 5 μA		$\pm 0.3\% \pm 1$ digit

WIP. R Measurement (R_c /ENR/CRV)

Range	Measuring range	Accuracy
100 Ω	Against STANDARD $+0.0\% \sim +19.9\%$	[R_c] $\pm 0.3\% \pm 1$ digit
1k Ω		[ENR] $\pm 2.0\% \pm 1$ digit
10k Ω		[CRV] $\pm 0.5\% \pm 1$ digit
100k Ω		
1M Ω		
10M Ω		

※Under 1.0% of the measured indication value for ENR/CRN is not targeted the measuring accuracy

Measuring time		
Measuring item	External start time	Measure by "Free run"
ΔTR	about 23.5msec.	about 21 times per second
$\Delta TR + R_c$	about 43msec.	about 15 times per second
$\Delta TR + R_c + ENR/CRV$	Above time + noise measuring time ※1	Above time + noise measuring time ※2

※ The above measurement time is in a case of zero setup for DELAY TIME on each range. The setup for each range is available up to 99msec.

※1 Noise measuring time (ENR/CRV), arbitrary time to operate the wiper from the second start to the stop signal.

※2 The setup time for sample time (SPL) of parameter setup item is to be a measuring time of (ENR/CRV) Default: 2 seconds

Completion of the measurement signal (EOC) Pulse width	1msec. ~ 199msec. [000] Continuous Output when setting
Measuring method	4-terminal measurement
Comparator setting range	ΔTR : +LIMIT $+0.0\% \sim +99.9\%$ -LIMIT $-0.0\% \sim -99.9\%$ R_c , ENR, CRV: +LIMIT $+0.0\% \sim +19.9\%$
Operation condition	[Temp.] $+5^\circ C \sim +40^\circ C$ [Humidity] less than 85%
Power supply	AC100V ~ 240V selectable, 50/60Hz, about 30VA
Outer dimension	about 333 (W) \times 99 (H) \times 300 (D) mm (excluding protruding parts such as rubber legs, etc.)
Weight	about 4kg

The Outline

AX-901 can measure not only "ALL RESISTANCE VALUE" (ΔTR) of variable resistor but also "LUMPED CONTACT RESISTANCE" (R_c) when wiper is stationary. And also AX-901 can measure to change element (DC/AC) in contact resistance continuously generated by movement wiper. (AC noise is called "ENR" / DC noise is called "CRV")

The measuring display part can display two items of ΔTR [$\pm 99.9\%$] and by switching R_c /ENR/CRV [19.9%].

Option

- GP-IB Interface
 - RS-232C Interface
 - Printer output (8 bit parallel Centronics)
- *Either one interface can built-in the option above.

- Printer cable