

Type 6300B 4-Terminal AC Resistance



6300B was designed under the technical guidance of NMIJ/AIST (The National Metrology Institute of Japan/The National Institute of Advanced Industrial Science and Technology/). The precision AC standard resistor realized AC-DC error less than 10 ppm at under 10 kHz and phase angle error less than 50 μ rad. The resistance is extremely stable thus it can be used as a resistance standard for DC as well as AC.

Features

- Excellent frequency response and minimal phase angle error
- Selectable either BPO/MUSA or BNC connector
- Suitable for 4-Terminal LCR Meter calibration due to 4-Terminal structure
- Resistance elements are thermally processed full well, so 6300B has a small temperature coefficient and high stability
- Best suited for calibration standard because of excellent accuracy, temperature coefficient and aging
- Variety of resistance values are available, so it can be used for many applications including temperature measurement.

Specifications

Item/Type	TYPE 6300B 10,25,100,1 k,10 k,100 k					
Nominal Value	10 Ω	25 Ω	100 Ω	1 k Ω	10 k Ω	100 k Ω
Accuracy of DC Resistance	Less than $\pm 0.5\%$	Less than $\pm 0.2\%$	Less than $\pm 0.02\%$	Less than $\pm 0.01\%$	Less than ± 50 ppm	
AC-DC Error	Less than 10 ppm (Deviation from DC Resistance) at 10 kHz					
Phase Angle Error	Less than 50 μ rad (Deviation from DC Resistance) at 10 kHz					
Temperature coefficient	Less than ± 3 ppm/ $^{\circ}$ C	Less than ± 1.8 ppm/ $^{\circ}$ C	Less than ± 1.8 ppm/ $^{\circ}$ C	Less than ± 0.8 ppm/ $^{\circ}$ C		
Stability	Less than 3 ppm/year					
Max. Power	0.3 W					
Structure	4-Terminal Pair (Connector: BPO/MUSA or BNC)					
Size (WxDxH) mm	100x80x83(BPO/MUSA Connector)					

- Carrying Case and BNC-BPO/MUSA Conversion Connector are available as options
- Specifications are subject to change without notice due to improvement
- SunJEM will design products to meet your individual requirements. Please feel free to consult with us for products other than ready-made ones.