

>368,688789 12437,23-2933 977 56-203 88849<  
>163,65546 67818,7-23987 911 56-203 88849<  
>198,65546 65612,23-2829 955 56-203 46549<  
>198,65546 65612,23-2829 95556-203 46549<  
>152,698016 68818,23-2399 92356-203 85549<  
>198,643836 78617,73-2289 783 56-203 55549<  
>124,634546 78672,23-7779 683 56-203 88349<  
>458,11142 83417,73-2337 876 56-203 83339<  
>145,523286 64486,22-2889 966 56-203 88849<  
>868,688789 12437,23-2933 977 56-203 55549<

## DATA SHEET

### MODEL 4310HR



### Temperature Stabilized High Resistance Standard

- Temperature Controlled
- 6 Elements
- Custom Values

### MODEL INFORMATION

The Model 4310HR, a six-element resistance standard is the latest development from Measurements International's series of DC resistors and shunts. After many years of research in resistance materials, the Model 4310HR insures that you get the best performance on the market today. Combined with MI's experience in automated resistance measurements the 4310HR is used as a temperature controlled, 6-element working resistance reference.

The six-resistance elements cover the range from 1 Giga ohm to 100 Tera ohms. The resistance elements feature excellent stability and extremely low temperature coefficients housed in a single unit. Each

resistance element is accessible from the back panel with all connections being made via N-type Connectors. The resistor elements are maintained at 30 degrees Celsius, with an operating environment temperature range extending from 18 to 28 degrees Celsius. The Model 4310HR can be mounted in any standard 19-inch instrument rack.

The 4310HR is housed in a double shielded enclosure, with the each inner enclosure being isolated from the external enclosure. This allows the inner enclosure to be driven with active guard voltages.

**Specifications:**

Nominal Resistance (ohms)	Nominal Resistance tolerance (+/- ppm)	12 Month Stability (+/- ppm)	Max Current (100mW)	Temperature Coefficient (+/- ppm/°C)	Max. Voltage (& Gradient)
1 GΩ	100	25	1μA	0.06	1kV
10GΩ	1%	100	100nA	2	1kV(5ppm/v)
100 GΩ	1%	100	10nA	2	1kV(5ppm/v)
1 T Ω	1%	250	1nA	2	1kV(10ppm/v)
10 T Ω	5%	500	100pA	2	1kV(20ppm/v)
100 TΩ	5%	2%	10pA	8	1kV(200ppm/v)
Product Details					
<b>Warranty</b>			1 Year Parts & Labor		
<b>Dimensions (H x W x D)</b>			133 x 450 x 133		
<b>Weight</b>			9 kg max		
<b>Shipping Weight</b>			13 kg.		
<b>Operating Power</b>			85 to 264V – 47 to 440Hz		

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