

## HIGH RESISTANCE TRANSFER STANDARDS

- *FULLY GUARDED DESIGN*
- *1 MΩ / STEP TO 1 TΩ / STEP*
- *FOR USE IN AIR*
- *INTERNAL TEMPERATURE SENSOR*



Guarded high resistance transfer standards allow accurate 100:1 build-up of high resistance.

Each device contains ten nominally equal resistors permanently connected in series. A commutator connects the ten resistors in parallel, giving 1/100<sup>th</sup> the series resistance.

The 1 & 10 megohm resistors are wound from specially selected wire to provide matched temperature and power coefficients. Higher values are of precious metal oxide construction. All resistors are hermetically sealed in inert gas. The internal resistor housings are connected to the guard network.

Internal guard resistors are nominally equal to the main resistor values up to 100 megohm. Above 100 megohm per step, the guard resistors are all nominally 100 megohm.

Each high resistance transfer standard is provided with a parallel commutator.

Each includes a thermistor for monitoring the internal temperature during use.

An optional series-parallel commutator connects nine of the resistors to provide a 10:1 ratio value.

All models are supplied with NIST traceable calibration data, including voltage coefficient characterization.

Low resistance Hamon transfer standards, based on the Leeds & Northrup design, are also available.

Model	Parallel Resistance	Series Resistance	Series-Parallel
306	100 KΩ	10 MΩ	1 MΩ
307	1 MΩ	100 MΩ	10 MΩ
308	10 MΩ	1 GΩ	100 MΩ
309	100 MΩ	10 GΩ	1 GΩ
310	1 GΩ	100 GΩ	10 GΩ
311	10 GΩ	1 TΩ	100 GΩ
312	100 GΩ	10 TΩ	1 TΩ

All resistance standards carry a five year warrantee

