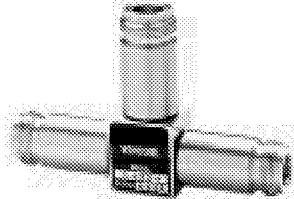


## Model 1870A & 1872A BROADBAND RESISTIVE POWER SPLITTERS (MATCHING)

dc to 18.0 GHz

1 WATT

Type N or GPC-7 Connectors



### FEATURES

These Weinschel Corporation Resistive Power Splitters are intended for applications in which one of the two outputs is included in a leveling loop or is used as a reference in a ratio system for the purpose of providing an output whose source impedance is essentially matched to 50 Ω. Some examples are:

- ❑ A dual-channel insertion loss measuring system where the resistive power splitter provides a reference and a signal channel for ratio meter.
- ❑ A parallel IF substitution insertion loss measuring system where the resistive power splitter provides a sampled output for leveling the signal source.
- ❑ A precision power source where a power meter of known characteristics is used, either by ratio or leveling to provide a calibrated output.

### SPECIFICATIONS

**NOMINAL IMPEDANCE:** 50 Ω

**FREQUENCY RANGE:** dc to 18.0 GHz

**INPUT SWR:** 1.30 maximum

**INSERTION LOSS:** 6 dB nominal, 7.5 dB maximum  
(Between Input and either output).

**MAXIMUM INPUT POWER:** 1 watt **average**, 1 kilowatt **peak**  
(Input connector only)

**OUTPUT TRACKING (Between Ports):**

FREQUENCY (GHz)	TRACKING (maximum dB)
dc - 8	0.15
8 - 18	0.20

**PHASE TRACKING:** ± 2 ° nominal between output ports

**POWER COEFFICIENT:** < 0.005 dB/dB/watt

**TEMPERATURE COEFFICIENT:** < 0.0004 dB/dB/°C

**TEMPERATURE RANGE:** -55 °C to +85 °C

**EQUIVALENT OUTPUT SWR (Port 2 & 3)\*:**

FREQUENCY (GHz)	SWR (maximum)
dc - 2	1.05
2 - 4	1.07
4 - 8	1.10
8 - 18	1.15

\* When used in a leveling or ratio system. Requires special test methods to verify.

**CONSTRUCTION:** Nickel plated brass body; stainless steel connectors; gold plated beryllium copper contacts.

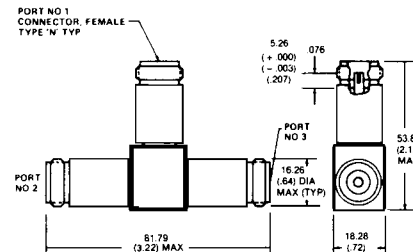
**CALIBRATION:** Test data is available at additional cost.

**CONNECTORS:** Type N connectors per MIL-STD-348 interface dimensions - mate nondestructively with MIL-C-39012 connectors. GPC-7 Connectors per IEEE-STD-287. Model 1870A contains all Type N female connectors. Model 1872A contains Type N female on input and GPC-7 connectors on outputs.

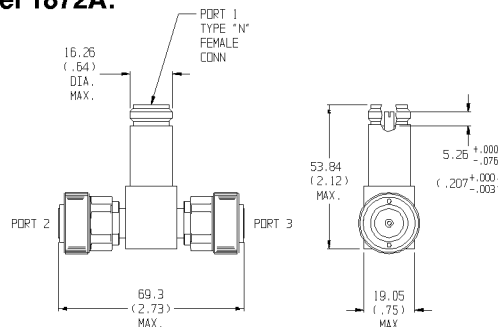
**WEIGHT:** Net 170 g (6 oz)

**PHYSICAL DIMENSIONS:**

**Model 1870A:**



**Model 1872A:**



NOTE: All dimensions are given inmm (inches) and are maximum, unless otherwise specified.