Test Equipment Solutions Ltd specialise in the second user sale, rental and distribution of quality test & measurement (T&M) equipment. We stock all major equipment types such as spectrum analyzers, signal generators, oscilloscopes, power meters, logic analysers etc from all the major suppliers such as Agilent, Tektronix, Anritsu and Rohde & Schwarz.

We are focused at the professional end of the marketplace, primarily working with customers for whom high performance, quality and service are key, whilst realising the cost savings that second user equipment offers. As such, we fully test & refurbish equipment in our in-house, traceable Lab. Items are supplied with manuals, accessories and typically a full no-quibble 2 year warranty. Our staff have extensive backgrounds in T&M, totalling over 150 years of combined experience, which enables us to deliver industry-leading service and support. We endeavour to be customer focused in every way right down to the detail, such as offering free delivery on sales, covering the cost of warranty returns BOTH ways (plus supplying a loan unit, if available) and supplying a free business tool with every order.

As well as the headline benefit of cost saving, second user offers shorter lead times, higher reliability and multivendor solutions. Rental, of course, is ideal for shorter term needs and offers fast delivery, flexibility, try-before-you-buy, zero capital expenditure, lower risk and off balance sheet accounting. Both second user and rental improve the key business measure of Return On Capital Employed.

We are based near Heathrow Airport in the UK from where we supply test equipment worldwide. Our facility incorporates Sales, Support, Admin, Logistics and our own in-house Lab.

All products supplied by Test Equipment Solutions include:

- No-quibble parts & labour warranty (we provide transport for UK mainland addresses).
- Free loan equipment during warranty repair, if available.
- Full electrical, mechanical and safety refurbishment in our in-house Lab.
- Certificate of Conformance (calibration available on request).
- Manuals and accessories required for normal operation.
- Free insured delivery to your UK mainland address (sales).
- Support from our team of seasoned Test & Measurement engineers.
- ISO9001 quality assurance.

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Web: www.TestEquipmentHQ.com
The Model 100W1000B is a portable, self-contained, air-cooled, broadband, completely solid-state amplifier designed for applications where instantaneous bandwidth, high gain and linearity are required. Push-pull circuitry is utilized in all high power stages in the interest of lowering distortion and improving stability. The Model 100W1000B, when used with a sweep generator, will provide a minimum of 100 watts of RF power.

The Model 100W1000B is equipped with a Digital Control Panel (DCP) which provides both local and remote control of the amplifier. The DCP uses a digital display, menu assigned softkeys, a single rotary knob, and four dedicated switches (POWER, STANDBY, OPERATE and FAULT/RESET) to offer extensive control and status reporting capability. The display provides operational presentation of Forward Power and Reflected Power plus control status and reports of internal amplifier status. Special features include a gain control, internal/external automatic level control (ALC) with front panel control of the ALC threshold, pulse input capability and RF output level protection. Also included is an internal RF detector which provides an output for use in self-testing or operational modes. Protection is provided by DC current level sensing and individual fusing of all output stages.

All amplifier control functions and status indications are available remotely in GPIB / IEEE-488 and RS-232 format. The buss interface connector is located on the back panel and positive control of local or remote operation is assured by a keylock on the front panel of the amplifier.

Housed in a stylish, contemporary bench top enclosure, the Model 100W1000B provides readily available RF power for typical applications such as RF susceptibility testing, antenna and component testing, watt meter calibration, and as a driver for frequency multipliers and higher power amplifiers. A safety interlock can be implemented via a rear panel connector.
SPECIFICATIONS
Model 100W1000B

RATED OUTPUT POWER.............................................................. 100 watts

INPUT FOR RATED OUTPUT .................................................. 1.0 milliwatt maximum

POWER OUTPUT @ 3dB compression
Nominal................................................................................... 123 watts
Minimum.............................................................................. 100 watts

POWER OUTPUT @ 1dB compression
Nominal............................................................................... 95 watts
Minimum....................................................................... 75 watts

FLATNESS.................................................................................. ±2.0 dB maximum
1.5 dB typical
±0.8 dB with internal leveling

FREQUENCY RESPONSE ............................................................. 1-1000 MHz instantaneously

GAIN (at maximum setting) ..................................................... 50 dB minimum

GAIN ADJUSTMENT (continuous range) ...................................... 18 dB minimum
(4096 steps remote)

INPUT IMPEDANCE ................................................................. 50 ohms, VSWR 2.0:1 maximum

OUTPUT IMPEDANCE .............................................................. 50 ohms, VSWR 2.5:1 maximum

MISMATCH TOLERANCE *......................................................... Will operate without damage or oscillation with any magnitude and phase of source and load impedance. Will limit reflected power to 100 watts.

MODULATION CAPABILITY........................................................ Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal

HARMONIC DISTORTION ......................................................... Minus 20 dBc maximum at 80 watts

THIRD ORDER INTERCEPT POINT............................................. 58 dBm typical

RF POWER DISPLAY ............................................................... 0-200 watts

PRIMARY POWER (user must specify) ...................................... 90-264 VAC
40/400Hz, single phase
1200 watts maximum

CONNECTORS
RF ....................................................................................... Type N female on front panel
REMOTE INTERFACES
IEEE-488 .............................................................................. 9 pin Subminiature D (female)
RS-232.................................................................................... Type BNC on front panel
ALC & PULSE ........................................................................ 15 pin Subminiature D

SAFETY INTERLOCK .................................................................. 15 pin Subminiature D

COOLING.................................................................................. Forced air (self contained fans)
* See Application Note #27

<table>
<thead>
<tr>
<th>MODEL NUMBER</th>
<th>RF INPUT</th>
<th>RF OUTPUT</th>
<th>WEIGHT</th>
<th>SIZE (W x H x D)</th>
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</thead>
<tbody>
<tr>
<td>100W1000B</td>
<td>Type N female on front panel</td>
<td>Type N female on front panel</td>
<td>40 Kg (88 lbs)</td>
<td>50.3 x 24.9 x 53.0 cm (19.8 x 9.8 x 21.1 in)</td>
</tr>
<tr>
<td>100W1000BM1</td>
<td>Type N female on rear panel</td>
<td>Type N female on rear panel</td>
<td>40 Kg (88 lbs)</td>
<td>50.3 x 24.9 x 53.0 cm (19.8 x 9.8 x 21.1 in)</td>
</tr>
<tr>
<td>100W1000BM2</td>
<td>Same as 100W1000B with enclosure removed for rack mounting</td>
<td>Type N female on rear panel</td>
<td>30 Kg (66 lbs)</td>
<td>48.3 x 22.2 x 53.0 cm (19 x 8.75 x 21.1 in)</td>
</tr>
<tr>
<td>100W1000BM3</td>
<td>Same as 100W1000BM1 with enclosure removed for rack mounting</td>
<td>Type N on rear panel.</td>
<td>30 Kg (66 lbs)</td>
<td>48.3 x 22.2 x 53.0 cm (19 x 8.75 x 21.1 in)</td>
</tr>
<tr>
<td>100W1000BM4</td>
<td>Type N on front panel.</td>
<td>Type N on rear panel.</td>
<td>40 Kg (88 lbs)</td>
<td>50.3 x 24.9 x 53.0 cm (19.8 x 9.8 x 21.1 in)</td>
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<tr>
<td>100W1000BM5</td>
<td>Same as 100W1000BM2 with manual gain control disabled</td>
<td>Type N on rear panel.</td>
<td>30 Kg (66 lbs)</td>
<td>48.3 x 22.2 x 53.0 cm (19 x 8.75 x 21.1 in)</td>
</tr>
<tr>
<td>100W1000BM6</td>
<td>See separate Specification Sheet for this model.</td>
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