

# TWAL

## 8 ... 18 GHz

## Travelling Wave Tube

### Standard Models

Model	Frequency Range	Output Power P <sub>N</sub> min W	Gain min / typ dB	Harmonics 2nd / 3rd dBc	Line Power W	Dimensions (H,D) 19"-System	Weight kg
TWAL 0818–250	8 ... 18 GHz	250	54 / 62 ±7.5	8 / 20	1500	3 HU, 610 mm	33

### Standard Specifications:

Input Power	0 dBm (1 mW) max.
Overdrive Protection:	up to +10 dBm for no damage
Input Impedance:	50 Ohm nominal
Output Impedance:	50 Ohm nominal
Input VSWR:	<2:1 typ.
Load VSWR:	2:1 max. for P <sub>N</sub> –0.5 dB infinite for no damage
Spurious (at P <sub>N</sub> ):	–50 dBc typ.(excluding harmonics)
Noise Figure:	20 dB max.
Class of Operation:	A–linear

### General:

RF Input:	1 ... 18 GHz: N–f; standard on rear panel 18 ... 40 GHz: k–f; standard on rear panel
RF Output (1 kW):	standard on rear panel 1 ... 10 GHz: N–f 8 ... 18 GHz: WRD 750 18 ... 26.5 GHz: WR 42 26.5 ... 40 GHz: WR 28

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RF Output (>1 kW):	standard on rear panel 1 ... 8 GHz: 7/16 8 ... 18 GHz: WRD 750
Gain Adjustment:	via status display (<4 GHz) or via thumbwheel (>4 GHz)
RF Monitor Output	–50 dB forward
Mains Supply:	200 ... 264 V AC / 47 ... 63 Hz
Power Meter:	via status display
Elapsed Time Meter:	via status display
Ambient Temperature:	0 ... +40 °C
Storage Temperature:	–20 ... +85 °C
Relative Humidity:	up to 95% (non–condensing)
Operating Altitude:	up to 2000 m above sea level
Vibration and Shock:	normal laboratory environment
Cooling:	forced air with integral blower, air intake and exhaust at rear

**Options:**

- |                                      |   |
|--------------------------------------|---|
| A) Reverse Monitor                   | G) Output Isolator                              |
| B) External Dual Directional Coupler | M) 115 V AC / 47 ... 63 Hz                      |
| C) IEEE–488.2 GPIB Remote Control    | N) Harmonic Filter                              |
|                                      | R) RS–232C Remote Control                       |
|                                      | U) USB Remote Control                           |
| (1)                                  | Combiner is limiting the actual frequency range |

Specifications are subject to change without notice

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