

TWAL

2 ... 8 GHz

Travelling Wave Tube

Standard Models

Model	Frequency Range	Output Power P_N min W	Gain min / typ dB	Harmonics 2nd / 3rd dBc	Line Power W	Dimensions (H,D) 19"-System	Weight kg
TWAL 0208-250	2 ... 8 GHz	250	54 / 62 $\pm$ 7.5	1 / 5	3000	5 HU, 660 mm	50
TWAL 0208-300	2 ... 8 GHz	300	54.8 / 63 $\pm$ 7.5	0 / 4	3500	5 HU, 660 mm	50
TWAL 0208-500	2 ... 8 GHz 2.5 ... 8 GHz (1)	500	54 / 62 $\pm$ 7.5	5 / 10	6000	14 HU, 660 mm	140
TWAL 0208-1000	2 ... 8 GHz 2.5 ... 8 GHz (1)	1000	50 / 58 $\pm$ 7.5	10 / 15	12000	32 HU, 800 mm	340

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_N -0.5 dB infinite for no damage
Spurious (at P_N):	-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
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BONN Elektronik GmbH – TWAL 2 ... 8 GHz

RF Output (1 kW):	18 ... 40 GHz: k-f; standard on rear panel 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
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
- B) External Dual Directional Coupler
- C) IEEE–488.2 GPIB Remote Control

- G) Output Isolator
- M) 115 V AC / 47 ... 63 Hz
- 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

