

TWAL

1 ... 2,5 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 0103–250	1 ... 2,5 GHz	250	54 / 62 ±7.5	4 / 12	3000	5 HU, 660 mm	48
TWAL 0103–320	1 ... 2,5 GHz	320	55 / 63 ±7.5	3 / 10	3500	5 HU, 660 mm	48
TWAL 0103–500	1 ... 2,5 GHz	500	54 / 62 ±7.5	2 / 10	4000	14 HU, 660 mm	140
TWAL 0103–1000	1 ... 2,5 GHz	1000	50 / 60 ±10	8 / 20	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 18 ... 40 GHz: k–f; standard on rear panel
RF Output (1 kW):	

BONN Elektronik GmbH – TWAL 1 ... 2,5 GHz

	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 | 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

