

## STANDARD MODELS

Model	Frequency Range	Output Power $P_N$ min / typ W	Gain min / typ dB	Harmonics 2nd / 3rd dBc	Line Power VA	Dimensions (H, D) 19"-System	Weight kg
TWAL 0103-250	1 ... 2.5 GHz	250 / 300	54 / 62 ±7.5	4 / 12	3000	5 HU, 660 mm	48
TWAL 0103-500	1 ... 2.5 GHz	500 / 600	54 / 62 ±7.5	2 / 10	4000	15 HU, 800 mm	140
TWAL 0103-500E	1 ... 2.5 GHz	500 / 600	57 / 62 ±5	2 / 10	3500	4 HU, 730 mm	40
TWAL 0103-1000	1 ... 2.5 GHz	1000 / 1100	50 / 60 ±10	8 / 20	12000	41 HU, 800 mm	340
TWAL 0103-1000E	1 ... 2.5 GHz	1000 / 1100	54 / 61.5 ±7.5	3 / 10	7000	12 HU, 800 mm	100

For individual data sheets, please click on the above model name

1 HU = 44.45 mm

## 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:	infinite for no damage (100% mismatch tolerant) $P_N$ -0.5 dB min. at VSWR 2:1
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	2.92 mm-f; standard on rear panel
RF Output (up to 1 kW):	1 ... 18 GHz	N-f
	6 ... 18 GHz	WRD 650
	8 ... 18 GHz	WRD 750
	18 ... 26,5 GHz	WR 42
	26,5 ... 40 GHz	WR 28
RF Output (1 kW or more):	1 ... 8 GHz	7-16-f
	8 ... 18 GHz	WRD 750
Mains Supply:	200 ... 240 V AC	47 ... 63 Hz
Elapsed Time Meter:	via status display	
Ambient Temperature:	0 ... 45 °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

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|--------------------------------------|---|
| A) RF Monitor Outputs *)             | N) Harmonic Filter *)                   |
| B) External Dual Directional Coupler | R) RS-232C Remote Control               |
| C) IEEE-488.2 GPIB Remote Control    | S) Internal RF Switching Unit *)        |
| D) Front Panel RF Connectors         | U) USB Remote Control                   |
| E) RF Power Indication (digital) *)  | W) Liquid Cooling                       |
| F) Gain Adjustment *)                | X) External Control of other Amplifiers |
| G) Output Isolator *)                |   |
| L) Remote Control                    |   |

\*) These options may reduce output power and/or gain