

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 0418-20	4 ... 18 GHz	20 / 40	43 / 48 ±5	0 / 5	500	3 HU, 630 mm	18
TWAL 0418-30E	4 ... 18 GHz				800	3 HU, 630 mm	16
	4 ... 4.5 GHz	25 / 30	44 / 54 ±10	0 / 1			
	4.5 ... 6 GHz	30 / 35	44.8 / 55 ±10	1 / 1			
	6 ... 16 GHz	70 / 90	48.5 / 59 ±10	4 / 15			
	16 ... 18 GHz	30 / 35	44.8 / 55 ±10	20 / 20			
TWAL 0418-40E	4 ... 18 GHz				800	3 HU, 630 mm	16
	4 ... 4.5 GHz	30 / 35	44 / 54 ±10	0 / 1			
	4.5 ... 6 GHz	40 / 45	45 / 55 ±10	1 / 1			
	6 ... 15 GHz	70 / 90	49 / 59 ±10	4 / 15			
	15 ... 18 GHz	40 / 45	45 / 55 ±10	20 / 20			
TWAL 0418-50DH (Hybrid)	4 ... 18 GHz				800	4 HU, 630 mm	35
	4 ... 6 GHz	50 / 60	47 / 50 ±3	20 / 20			
	6 ... 17 GHz	50 / 60	47 / 52 ±5	5 / 15			
	17 ... 18 GHz	35 / 50	45.4 / 51 ±5	20 / 20			
TWAL 0418-100E	4 ... 18 GHz				800	4 HU, 630 mm	20
	4 ... 4.5 GHz	80 / 100	50 / 60 ±10	0 / 3			
	4.5 ... 18 GHz	100 / 120	50 / 60 ±10	1 / 10			

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

TWAL 4 ... 18 GHz TWT Amplifiers

	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

- | | |
|--------------------------------------|---|
| 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