

## STANDARD MODELS

Model	Frequency Range	Output Power P <sub>P</sub> min / Duty W / %	Pulse Width max. **)	Gain typ dB	Harmonics 2nd / 3rd dBc	Line Power VA	Dimensions (H, D) 19"-System	Weight kg
TWAP 1113-20000	1.1 ... 1.3 GHz	20000 / 2	50 µs	80 ±7.5	20 / 20	2750	12 HU, 800 mm	115

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 <sub>N</sub> -0.5 dB min. at VSWR 2:1
P-RF:	100 kHz max.
Spurious (at P <sub>N</sub> ):	-50 dBc typ. (excluding harmonics)
Class of Operation:	A-linear

## GENERAL

RF Input:	<8 GHz	N-f, standard on rear panel
	8 to 18 GHz	SMA-f, standard on front panel
	>18 GHz	2.92 mm-f, standard on front panel
RF Output:	<8 GHz	7-16-f, standard on rear panel
	4 to 8 GHz	WRD 350, standard on rear panel
	8 to 12 GHz	WR 90, standard on rear panel
	8 to 18 GHz	WRD 750, standard on rear panel
	12 to 18 GHz	WR 62, standard on rear panel
Mains Supply:	PLine up to 3 kVA	200 ... 240 V AC
	PLine >3 kVA	3x 400 V AC
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:	MIL-STD-810 G	
Cooling:	forced air with integral blower	
	air intake from front, air exhaust at rear	

## OPTIONS

A) Sample Ports *)	L) LAN Remote Control
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

# TWAP 1.1 ... 1.3 GHz Pulsed TWT Amplifiers

F) Gain Adjustment \*)  
G) Output Isolator \*)  
H) DC Supply  
I) 3x 208 V AC / 60 Hz  
J) 100 V AC

X) External Control of other Amplifiers

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

\*\*\*) Optionally other pulse width available