

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 1113-400 | 10.5 ... 13 GHz | 400 / 450 | 46 / 56 ±10 | 10 / 20 | 4000 | 15 HU, 700 mm | 90 |

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

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

TWAL 10.5 ... 13 GHz TWT Amplifiers

F) Gain Adjustment *)
G) Output Isolator *)
L) Remote Control

X) External Control of other Amplifiers

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