# **TWAL** 10 ... 12 GHz
TWT Amplifiers

BONN Elektronik
YOUR ULTIMATE RF POWER SOURCE

## 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 1012-1000 | 10 ... 12 GHz | 1000 / 1200 | 50 / 60 ±10 | 10 / 20 | 7000 | 13 HU, 700 mm | 90 |

1 HU = 44.45mm

## 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. für $P_N$ -0.5 dB; | |
| | infinite for no damage | |
| **Spurious (at $P_N$):** | -50 dBc typ. (excluding harmonics) | |
| **Noise:** | 1 ... 18 GHz | -20 dBm / MHz |
| | 18 ... 40 GHz | -35 dBm / MHz |
| **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:** | 1 ... 8 GHz | N-f |
| | 6 ... 18 GHz | WRD 650 |
| | 8 ... 18 GHz | WRD 750 |
| | 18 ... 40 GHz | WRD 180 |
| **Sample Port:** | -50 dB forward | |
| **Mains Supply:** | 200 ... 264 V AC | 47 ... 63 Hz |
| **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) RF Monitor Outputs
B) External Dual Directional Coupler
C) IEEE-488.2 GPIB Remote Control
D) Front Panel RF Connectors
E) Power Indication (digital)
F) Gain Adjustment
G) Output Isolator
L) LAN Remote Control
N) Harmonic Filter
R) RS-232C Remote Control
U) USB Remote Control