TWAL 27 ... 31 GHz
TWT Amplifiers

BONN Elektronik
RF POWER IS OUR PASSION

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 2731-100E	27 ... 31 GHz	100 / 120	50 / 55 ±5	12 / 15	1250	6 HU, 800 mm	35

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): -60 dBc min. (excluding harmonics)
Noise Figure 20 dB max.
Class of Operation: A-linear

GENERAL

RF Input: 2.92 mm-f, standard on rear panel
RF Output: WR 28, standard on rear panel
Mains Supply: 200 ... 240 V AC, 47 ... 63 Hz
Elapsed Time Meter: via status display
Ambient Temperature: 0 ... +45 °C
Storage Temperature: -25 ... +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
Option W: Liquid cooling
External heat exchanger required

OPTIONS

A) RF Monitor Outputs *)
B) External Dual Directional Coupler
C) IEEE-488.2 GPIB Remote Control
D) Front Panel RF Connectors
E) RF Power Indication (digital) *)
N) Harmonic Filter *)
R) RS-232C/RS-485 Remote Control
S) Internal RF Switching Unit *)
U) USB Remote Control
W) Liquid Cooling

F) Gain Adjustment *)
G) Output Isolator *)
L) Remote Control
X) External Control of other Amplifiers

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