

## STANDARD MODELS

| Model           | Frequency Range | Output Power<br>$P_N$ min / typ<br>W | Gain<br>min / typ<br>dB | Harmonics<br>2nd / 3rd<br>dBc | Line Power<br>VA | Dimensions<br>(H, D)<br>19"-System | Weight<br>kg |
|-----------------|-----------------|--------------------------------------|-------------------------|-------------------------------|------------------|------------------------------------|--------------|
| TWAL 0208-250E  | 2.5 ... 8 GHz   | 250 / 300                            | 54 / 62 ±7.5            | 3 / 10                        | 2500             | 4 HU, 630 mm                       | 38           |
| TWAL 0208-500E  | 2.5 ... 7.5 GHz | 500 / 600                            | 57 / 62 ±5              | 5 / 15                        | 3000             | 4 HU, 630 mm                       | 30           |
| TWAL 0208-1000E | 2.5 ... 7.5 GHz | 1000 / 1100                          | 54 / 61.5 ±7.5          | 5 / 10                        | 6000             | 12 HU, 800 mm                      | 100          |

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<br>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<br>air intake and exhaust at rear |                                   |

## OPTIONS

|                                      |                           |
|--------------------------------------|---------------------------|
| A) RF Monitor Outputs                | G) Output Isolator        |
| B) External Dual Directional Coupler | L) LAN Remote Control     |
| C) IEEE-488.2 GPIB Remote Control    | N) Harmonic Filter        |
| D) Front Panel RF Connectors         | R) RS-232C Remote Control |

# TWAL 2 ... 8 GHz TWT Amplifiers

E) Power Indication (digital)  
F) Gain Adjustment

U) USB Remote Control