

## TWT6G12G-280

### 6.0-12.0GHz 300 Watt (typ) CW TWT Amplifier



#### MAIN FEATURES

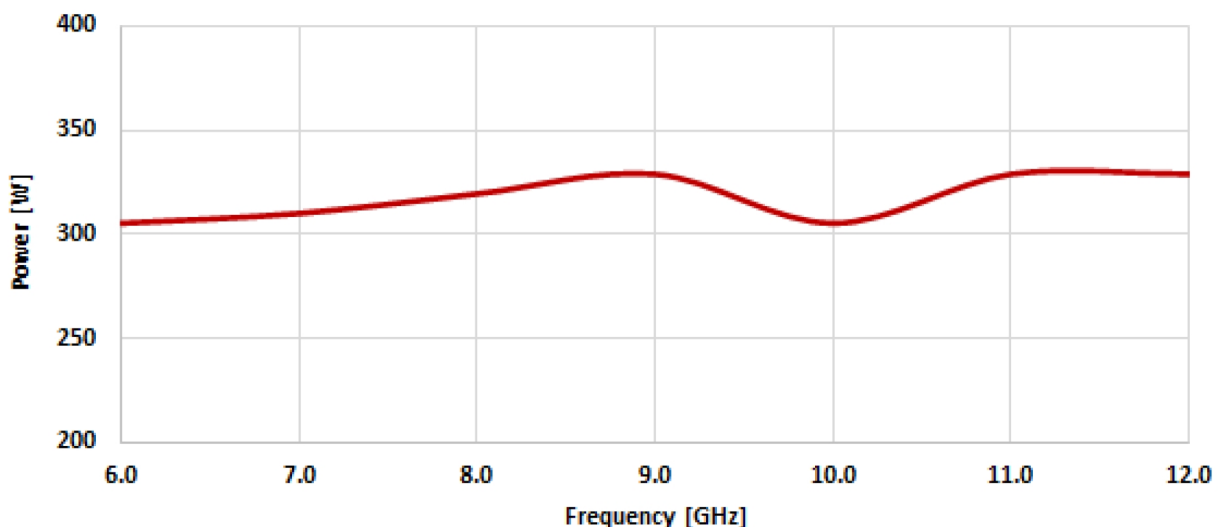
- User Interface
- Rugged, Ultra-Reliable Design
- Ethernet and GPIB Remote Interface
- 3 year warranty (1 Year on the tube)
- Plug and Play Field-Replaceable Power

The TWT6G12G series of CW TWT Amplifier provide outstanding RF performance. These 6.0 to 12.0 GHz TWTA's (traveling wave tube amplifiers) have field proven reliability and industry leading performance. This makes these amplifiers ideal for multiple high frequency high power applications including EMC / Radiated Immunity, Communications, EW, Radar, RF Component Testing, and scientific applications.

Operation safety and ease of use are paramount in Teseq CW TWT amplifier product designs. The TWT6G12G series includes a full complement of RF and hardware protection systems including high VSWR, over-current, voltage and TWT arc protection as well as redundant thermal and airflow sensors to prevent the TWT from overheating.

TWT6G12G series includes a display screen and web page providing instant operational and critical parameter status, as well as built in self-test, advanced fault diagnostics and modular plug and play field replaceable power supplies. This modular design offers ease of service providing quick turn around times. In addition, these amplifiers will log operational hours and any tripped states with a date stamp throughout their life which greatly aids diagnostics.

### TWT6G12G-280



## Technical Specifications

|                           |                         |
|---------------------------|-------------------------|
| Frequency Range           | 6 - 12GHz               |
| Frequency (min.) GHz      | 6 GHz                   |
| Frequency (max.) GHz      | 12 GHz                  |
| Psat (typ)                | 300 W                   |
| Small Signal Gain         | 54 dB                   |
| Modulation Formats        | AM, FM, Pulse           |
| Output VSWR Tolerance     | < 3:1                   |
| Stability                 | Unconditional           |
| Output Impedance          | 50 Ohm                  |
| Input VSWR                | 2:1 (typical)           |
| Output VSWR               | 2.25:1 (max)            |
| 2nd Harmonic              | Typ -5.5dBc / Max -5dBc |
| Spurious                  | -30 dBc                 |
| Operating Temperature     | 0°C to +40°C            |
| Non-Operating Temperature | -10°C to +50°C          |
| Humidity                  | 80% Max, non condensing |

## General Specifications

|                     |  |
|---------------------|--|
| Safety Interlock    | BNC-female                                   |
| Supply Voltage      | "1-Phase: 200-264 V or 3-Phase: 187-230 VLL" |
| Supply Frequency    | 47 to 63 Hz                                  |
| Supply Power (typ.) | 2 kVA  |
| RF Input Connector  | Type N female                                |
| RF Output Connector | WRD650                                       |
| Com. Interface      | GPIB & Ethernet                              |
| Dimensions          | 6U, 19 inch, 800mm (WxHxD)                   |
| Weight kg           | 44 kg  |
| Cooling System      | Air Cooled, Self Contained                   |

## Available Variants

| Product          | Configuration             | Item #   |
|------------------|---------------------------|----------|
| TWT6G12G-280-001 | Front Panel RF Connectors | 3-342012 |
| TWT6G12G-280-002 | Rear Panel RF connectors  | 3-342013 |