200W Outdoor TWT Amplifier
for Satellite Communications

The T02UO-2G
200 Watt TWT Power Amplifier — higher efficiency in an environmentally sealed compact package designed for outdoor operation

Less Prime Power, More Efficient
CPI’s environmentally sealed 200 W Ku-band hubmount TWTA is the most efficient amplifier in its class. Consuming only 650 W prime power to achieve 175 W at the flange, the Mini-Ku is at least 24% more efficient than any similar product.

Reliable
Designed and built to survive in extremely adverse environmental conditions. Operates in ambient temperatures up to 60°C.

Digital Ready, Simple to Operate
User-friendly microprocessor-controlled logic. Integrated Ethernet computer interface and forward power detection over CIF are now standard. A variety of optional configurations, including integral linearizers and BUCs, is available.

Highly Compact
10% smaller and 25% lighter than any other 200 W TWTA.

Easy to Maintain
Modular design and built-in fault diagnostic capability via remote monitor and control.

Global Applications

Worldwide Support
Backed by over three decades of satellite communications experience and CPI’s worldwide 24-hour customer support network that includes sixteen regional factory service centers.
Electrical (continued)

Intermodulation
-24 dBc max. with respect to the sum of both carriers at total output power 7 dB OBO (4 dB OBO with optional linearizer)

Primary Power
100-240 VAC ±10% single phase, 47-63 Hz

Power Consumption
700 VA max; 600 VA typ. at 100 W output power

Power Factor
0.95 min.

Environmental (Operating)

Ambient Temperature
-4°C to +60°C operating, including solar loading; -40°C to +71°C non-operating

Relative Humidity
100% condensing

Altitude
10,000 ft. with standard adiabatic derating of 2°C/1000 ft., operating; 50,000 ft., non-operating

Shock
20 g pk, 11 mS, 1/2 sine

Vibration
3 grms

Acoustic Noise
65 dBA @ 3 ft. from amplifier

Mechanical

Cooling
Forced air with integral blower

Computer Interface
Ethernet (serial interface optional)

RF Input Connection
Type N female (standard)

RF Output Connection
WR-75 waveguide flange, grooved with UNC 2B 6-32 threaded holes

RF Output Monitor
Type N female, 44 dB nom.

Dimensions (W x H x D)
8.5 x 8.5 x 15.0 in. max. (216 x 216 x 381 mm)

Weight
24.25 lbs (11.0 kg) with no options; 25.41 lbs (11.5 kg) with BUC

OPTIONS:
• Remote Control Panel
• Redundant Subsystems
• Integrated 1:1 switch control and drive
• Integral Linearizer
• Extended Frequency --- 12.75 - 14.50 GHz
• Attenuated Solid State IPA
• Serial Interface
• Integral L-Band Block Upconverter (BUC --- option is available over 12.75 to 13.25 GHz OR 13.75 to 14.50 GHz frequency ranges only). This data sheet does not provide amplifier specifications for when the BUC is included. Consult CPI for details.