

## For EMC/EMI and other instrumentation applications.

Provides a minimum of 40 watts of power in a split-mount package, across the 26.5 to 40.0 GHz frequency range.

### Touchscreen Graphical Interface

State of the art touchscreen interface with both amplifier and/or system level control capabilities. Includes fault logs, parameter trending and scopescreen for monitoring performance. Internal switch control eliminates need for external controllers.

### Easy to Maintain

Modular design and built-in fault diagnostic capability with convenient and clearly visible indicators for easy maintainability in the field. A USB port is available for uploading new firmware and system configurations, and downloading logs and system configurations for cloning to other units.

### Meets Global Requirements

Meets International Safety Standard EN-60215, Electromagnetic Compatibility 2014/30/EU and Harmonic Standard EN-61000-3-2 to satisfy worldwide requirements. CE Marked.

### Worldwide Support

Backed by over 40 years of satellite communications experience, and CPI's worldwide 24-hour customer support network that includes more than 20 regional factory service centers.



CPI 40 W Ka-band TWTA, Model TZA6902J1, shown here with optional cradle

### OPTIONS:

- Input isolator
- IEEE-488 interface
- RS-232 or RS-422/485 serial interface
- Interconnect cable up to 12 meters
- RF cradle reduces setup time (shown in above photo)

Quality Management  
System - ISO 9001:2015



Specification	CPI Model TZA6902J1, 40 W Ka-band Split-Mount TWTA
<b>Electrical Specifications</b>	
Frequency	26.5 to 40.0 GHz
Output Power (min) TWT CW Power Flange	40 W (46.0 dBm) 39 W (45.9 dBm) min.
Bandwidth	13.5 GHz, instantaneous
Gain	46 dB min. at rated power output
Gain Stability	±0.25 dB/24 hour max. (at constant drive and temp.) ±1.0 dB over temperature range
Gain Variation	±5.0 dB pk-pk typ. across full bandwidth, at 6 dB backoff
RF Level Adjust Range	0 to 20 dB typ.
Attenuator Step Size	0.1 dB typ.
Input VSWR	1.7:1 typ, 2.4:1 max.
Output VSWR	1.35:1 typ, 1.50:1 max.
Load VSWR	2.0:1 max; no degradation, infinite VSWR without damage
Phase Noise	-120 dBc/Hz max. from 1 to 350 MHz, 6 dB below IESS-308 below 1 MHz (-21 dBc/Hz typ.)
Noise and Spurious	-50 dBc max.
Noise Power Out	+23 dBm max. total
Primary Power	100-240 VAC ± 10% single phase, 47-63 Hz
Power Consumption	700 VA typ. at saturate RF output power; 1200 VA max.
Power Factor	0.95 min.
<b>Environmental Specifications</b>	
Ambient Temperature	-10°C to +50°C operating
Relative Humidity	RF unit: 100% condensing; PS unit: 95% non-condensing
Altitude	10,000 ft. with standard adiabatic derating of 2°C/1000 ft, operating; 50,000 ft. non-operating
Shock and Vibration	As encountered in normal truck transportation
<b>Mechanical Specifications</b>	
Cooling	Forced air with integral blower
RF Input Connection	WR28F waveguide flange
RF Output Connection	WR28G waveguide flange
Remote Interface	RS422/485 serial, RS232 serial, or IEEE-488 GPIB
RF Output Monitor	Type K female
Dimensions (W x H x D)	RF Section: 8.5 x 12.83 x 20 inches (216 x 324 x 508 mm) PS Section: 19 x 8.75 x 24 inches (483 x 223 x 610 mm)
Weight	RF Section: 40 lbs max. (18.2 kg) PS Section: 50 lbs max. (22.7 kg)
<b>Heat and Acoustic</b>	
Heat Dissipation	450 W typ.
Acoustic	65 dBA typ.



**SMP Division**  
**Satcom Products**  
tel: +1 (669) 275-2744  
email: [satcommarketing@cpii.com](mailto:satcommarketing@cpii.com)  
web: [www.cpii.com/satcom](http://www.cpii.com/satcom)

For more detailed information, please refer to the corresponding CPI technical description if one has been published, or contact CPI. Specifications may change without notice as a result of additional data or product refinement. Please contact CPI before using this information for system design.

© 2020 Communications & Power Industries LLC. Company proprietary; use and reproduction is strictly prohibited without written authorization from CPI.