

Split Mount

The split mount configuration provides for direct feed mounting to minimize waveguide RF losses over the entire 18.0 to 26.5 GHz frequency range. The power supply maintains the convenience of a rack mounted unit with built-in monitors and controls located up to 12 meters away.



CPI 40 W K-band TWTA, for EMC and Industrial applications. Model VZK6901J1, 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 option reduces setup time (shown in above photo)

Versatile

Ultra wide-band, automatic fault recycle, user friendly microprocessor-controlled logic with integrated RS-422/485 computer interface. IEEE interface and other options available.

Easy to Maintain

Automatic sequencing of voltages and filament time delay. The power supply HV outputs to the appropriate TWT label voltages are automatically set with an integrated, individualized TWT personality interface module.

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. Universal input voltage.

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.

Quality Management
System - ISO 9001:2015



Specification	CPI Model VZK6901J1, 40 W K-band Split-Mount TWTA
Electrical Specifications	
Frequency	18.0 to 26.5 GHz
Output Power (min) TWT CW Power Flange	40 W (46.0 dBm) 39 W (45.9 dBm) min.
Bandwidth	8.5 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.
Environmental Specifications	
Ambient Temperature	-10°C to +50°C operating
Relative Humidity	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
Mechanical Specifications	
Cooling	Forced air with integral blower
RF Input Connection	WR42F waveguide flange
RF Output Connection	WR42G 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)
Heat and Acoustic	
Heat Dissipation	450 W typ.
Acoustic	65 dBA typ.



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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.

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