

VSTAR30 Millimeter Wave Amplifier

Split Mount

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

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.

Global Applications

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 more than four decades of satellite communications experience, and CPI's worldwide 24-hour customer support network which includes over twenty regional factory service centers.



Model VZA6902J1

40 W split-mount TWTA for **testing and measurement applications** (shown here with optional RF 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)



40 W Split-Mount TWTA

Specification	Model VZA6902J1
Electrical Specifications	
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.
Environmental Specifications	
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
Mechanical Specifications	
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)
Heat and Acoustic	
Heat Dissipation	450 W typ.
Acoustic	65 dBA typ.

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Quality Management
System - ISO 9001:2008

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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