CPI 300 W TouchPower™ TWTAs

C/M-Band

For EMC/EMI and other instrumentation applications

Provides 250 watts of power (at the HPA flange) in a 5 rack unit package, across the 6.0 to 18.0 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.

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 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 300 W C/M-band TWTA, Model TZCM6183J1

OPTIONS:

- Input isolator (-1 dB gain)
- Remote control panel
- LifeExtender™ / LifePredictor

Quality Management System - ISO 9001:2015 CE



Specification	300 W TouchPower™ TWTA, CPI model TZCM6183J1
Frequency	6.0 to 18.0 GHz
TWT Rated Flange Power, CW	300 W CW (54.8 dBm)
TWTA Rated Flange Power, CW	250 W CW (54.0 dBm)
Bandwidth	12.0 GHz
Gain	53.5 dB min. at rated power output, 55.5 dB typ. at small signal
RF Level Adjust Range	0 to 20 dB continuous
Gain Stability	±0.25 dB/24 hour max. (after 30 minute warmup and at constant drive and temperature)
Gain Variation	12 dB pk-pk (equalizer is standard) at rated power
VSWR Input Output Load	2.5:1 max., 2.01 typical (with optional input isolator) 2.5:1 typ. 2.0:1 max
Phase Noise	Meets IESS 308/309
Noise and Spurious	-50 dBc typ. excluding harmonics
Harmonic Content	-5 dBc typ. at lower band edge
Prime Power	120-240 VAC single phase ±10%; 47 to 63 Hz
Power Consumption	1900 VA nominal
Inrush Current	200%
Ambient Temperature	-10°C to +45°C operating; -54°C to +71°C non-operating
Relative Humidity	95% non-condensing
Altitude	10,000 ft. above sea level (3,048 m), with standard adiabatic de-rating of 2°C per 1000 ft. operating; 50,000 ft. non-operating
Shock and Vibration	Designed for normal transportation environment per section 514.4 MIL-STD-810G. Designed to withstand 20 G peak at 11 ms (1/2 sine pulse in non-operating conditions)
Acoustic Noise	<68 dBA at one meter from front panel
Cooling	Forced air with integral blower. Rear air intake and exhaust
Input RF Connector	Type SMA Female
Output RF Connector	WRD-650; 6.0 to 18.0 GHz
RF Power Monitors	Type SMA Female, -50 dB nominal
M&C Interface	RJ45 Ethernet, includes embedded GUI control (RS422/485, RS232 serial interface optional) (GPIB optional)
USB Port	Download/Upload software, logs
Dimensions, W x H x L	19.0 x 8.75 x 26.0 in (483 x 222 x 661 mm)
Weight	100 lbs (45.5 kg) nom.
Safety	EN-60215



Power Electronics:

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