CPI 250 Watt Peak TWTA

V-Band

CPI V-Band TWTA for Satellite Uplink Communications

Provides 80 watts of minimum power in a rugged and compact weatherproof package, digital ready, for wideband single- and multi-carrier satellite service over a 4.2 GHz bandwidth (5.2 GHz bandwidth optional) within the V-band frequency band. Ideal for fixed earth station applications.

Cost Effective and Efficient

Mounting at the antenna improves performance by reducing IFL losses and saves cost in system design. Provides 80 W of linear power at the amplifier flange.

Rugged and Easy to Maintain

Built-in fault diagnostic capability via remote monitor and control. Easy access enclosure for improved serviceability. CAN-Bus architecture improves reliability and improves noise immunity. User-friendly microprocessor-controlled logic with integrated Ethernet computer interface.

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 certified. SNMP enabled.

Worldwide Support

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



CPI 250 W V-band TWTA, provides up to 80 watts of linear power at the flange

FEATURES:

- Ethernet interface with integral web server for easy monitoring and control
- SNMP interface (v1, v2, or v3)
- EMC Directive 2014/30/EU
- Harmonic Standard EN-61000-3-2

OPTIONS:

- 5.2 GHz operation from 47.2 to 52.4 GHz
- Remote control panel
- Integral linearizer
- Integral 1:1 switch control and drive
- Liquid cooling (please see CPI doc. MKT-492 for dimensions and specifications)
- Redundant systems
- Harmonic filter
 - standard on 52.4 GHz version
 - optional for 51.4 GHz version
- Serial interface (RS232/422)
- Uplink power control

Quality Management System - ISO 9001:2015 CE



ELECTICAL SPECIFICATIONS 0.47.2 to 51.4 GHz 47.2 to 52.4 GHz Ordpot Prequency 250 W(53.57 GHz) 200 W(53.07 GHz) Peak Amplifier Flange Power 260 W(53.07 GHz) 200 W(53.07 GHz) Peak Amplifier Flange Power 260 W(53.07 GHz) 200 W(53.07 GHz) Rated Linear Amplifier Flange Power 260 W(50.03 GHz) 278 GHz max. at total autyau power of 80 W with linearizer Intermediation - with respect to carriers -28 GHz max. at total outyau power of 80 W with linearizer 19 GH at 70 W outyou power Spectral Regrow Whith Respect to carriers -28 GHz max. at total outyau power of 80 W with linearizer 19 GH at 70 W outyou power Gain Amplifier Flange Power -26 GHz max. at total outyau power of 80 W with linearizer 19 GH at 70 W outyou power Gain At Adjutt Amplifier Flange Power -0.00 GH Wat at total Outyou power of 90 W with linearizer 19 GH at 70 W outyou power Gain Stability -0.00 GH Wat the Output power of 70 W with option 18 mone. 19 GH at 70 W output power Gain Stability -0.00 GH Wat the Not output power of 90 W with linearizer 0.00 GHz Max Spectra Regrow Aut Power -0.00 GHz Wat the Advec Max at total output power of 90 W other 30 GHz Max. At total Output power Spectra Regrow Aut Power	Specification		CPI Model TL02VO-A1 - 250 W Peak Power V-Band TWTA		
Output Frequency 47.2 to 51.4 GHz 47.2 to 52.4 GHz Pask TWT Flange Power 250 W (53.97 dBm) Rated Linear Amplifier Flange Power 80 W (49.03 dBm) Rated Linear Amplifier Flange Power 80 W (49.03 dBm) Harmadultation-with respect to each of the stand output power of 80 W with linearizer 19 dB at 25 W output power of 2 regul carriars -25 dBc max. at total output power of 80 W with linearizer 19 dB at 25 W output power Spectral Regrowth -30 dB cmax. at total Oxp power with linearizer 19 dB at 25 W output power Spectral Regrowth -30 dB cmax. at rated CV power with linearizer 19 dB at 25 W output power Gain 60 dB min; 44 dB ysp. at 33 Backoff from mated CV power 30 dB max. over any 1 GHz band. Spectral Regrowth -30 dB cmax. at rated CV power with linearizer 5 dB pic/sh max. core any 250 MHz Spectral Regrowth -10 3 dB xis PIM clock attenuator) typ. 0.1 dB stps 5 dB pic/sh max. core any 250 MHz Small Signal Gain Variation -4 dB pic/sh max. core any 250 MHz 1.5 dB pic/sh max. core any 250 MHz Small Signal Gain Variation -1.5 dB back With some on any 250 MHz 1.5 dB back Max. core any 250 MHz Input/Choput VSWT	ELECTRICAL SPECIFICATIONS				
Pask Amplifer Flange Power 250 W (53.70 rBm) Pask Amplifer Flange Power 200 W (53.00 Bm) Read Linear Amplifier Flange Power 80 W (93.00 Bm) Intermodulation - with respect to each of the sun of two carriers -28 dBc max, at total output power of 80 W with linearizer Intermodulation - with respect to each of 2 equal carriers -25 dBc max, at total output power of 80 W with linearizer Spectral Regrower -30 dB max, at total output power of 80 W with linearizer Spectral Regrower -30 dB max, at rade CW power with linearizer Spectral Regrower -0.03 dB max, at rade CW power with linearizer Spectral Regrower 0.03 dB max, at rade CW power with linearizer Spectral Regrower 0.03 dB max, at rade CW power with linearizer Sind Stubility 0.03 dB max, accounts the s2 of the band 5.48 pc/pk max, across the 5.2 Of the band Spectral Regrower 1.31 max. 3.04 Bm xox over any 250 MHz Shift pc/pk max, corres at y 0.54 Bis with Respect 3.04 Bm xox over any 1.07 thand; 1.64 Bis with Respect AMPM Conversion -5.03 Bis with Respect 3.04 Bm xox over any 250 MHz Shift pc/pk max, corres at y 0.54 Bis with Respect 3.04 Bm xox over any 1.07 thand; 1.64 Bis ycb max, corer any 250 MHz Shift pc/pk	Output Frequency		47.2 to 51.4 GHz	47.2 to 52.4 GHz	
Peak Angiliar Flange Power 800 W (49.03 dBm) Rated Liner An-piller Flange Power 800 W (49.03 dBm) Intermedulation with respect to the sum of two carries -28 dBc max, at total output power 08 0W with linearizer Intermedulation with respect to the sum of two carries -28 dBc max, at total output power 08 0W with linearizer Intermedulation with respect to the sum of two carries -30 dBc max, at total output power 08 0W with linearizer Spectral Regrew to the Sum of two carries -00 dB min, del dB bp, at 30 dB backoff from rated CVD power Spectral Regrew to the Sum of two carries -00 dB min, del dB bp, at 30 dB backoff from rated CVD power Spectral Regrew to the Sum of two carries of two ca	Peak TWT Flange Power		250 W (53.97 dBm)		
Bated Loop Arrive Control 600 (440.03 dBm) Intermodulation - with source and source prover of 80 W with linearizer	Peak Amplifier Flange Power		200 W (53.00 dBm)		
International with eventses 2.8 Bic max. at total output power of 80 W with linearizer Ref with analysis 2.8 Bic max. at total output power of 80 W with linearizer NPR With analysis 19.8 Bit 30 W output power of 80 W with linearizer Spectral Regression -0.9 UB emax. at total 00 wover with linearizer Gain Statility 50.4 Bit min. 44 Bit pp. at 3.8 Bit Adoit from rated CW power Gain Statility -0.9 UB emax. at rated CW power with linearizer Gain Statility -0.9 UB emax. at rated CW power with linearizer Gain Statility -0.9 UB emax. across the 4.2 GHz band Gain Statility -0.9 UB emax. across the 4.2 GHz band Salid Signal Gain Xer Statility -0.9 UB emax. across the 4.2 GHz band Salid Signal Gain Xer Statility -1.9 UB emax. across the 4.2 GHz band Salid Signal Gain Xer Statility -1.9 UB emax. over any 130 Hz band Salid Signal Gain Xer Statility -1.9 UB emax. over any 130 Hz band Salid Signal Gain Xer Statility -1.9 UB emax. over any 130 Hz band Salid Signal Gain Xer Statility -1.9 UB emax. over any 130 Hz band Salid Signal Gain Xer Statility -1.9 UB emax. over any 130 Hz band Salid Signal Gain Xer Statility -1.9 UB emax. over any 130 Hz band	Rated Linear Amplifier Flange Power		80 W (49.03 dBm)		
Internetional set in the set in	Intermodulation - with respect to the sum of two carriers		-28 dBc max. at total output power of 80 W with linearizer		
NPR (with linearizer option) 19 db at 80 W output power (75 W with optional harmonic filter) 19 db at 75 W output power Spectral Regrowth -30 dbc max. at rated CW power with linearizer	Intermodulation - with respect to each of 2 equal carriers		-25 dBc max. at total output power of 80 W with linearizer		
Spectral Regrowth -30 dBc max, at rated CW power with linearizer Gain 60 dB min; 64 dB typ, 81 dB bbckoff from rated CW power RF Level Adjust Raruer 0 to 30 dB inia; PM diode attenuator) typ, 0.1 dB steps Gain Stability 0 to 30 dB max, our any 1 GHz band; 1 dB bpck max, across the 4.2 GHz band 5 dB pkpk max, our any 1 GHz band; 1 dB bpck max, our any 250 MHz Input/Output VSWR 1.3.1 max. 2.0.1 max, operational; any value for operation without damage Phase Noise 2.0.1 max, operational; any value for operation without damage Charles Nore 2.59/dB max. for a single-carrier up to 4 dB OBO from rated CW power (at rated CW power fama) about come and tabet present come and tabet prese	NPR (with linearizer option)		19 dB at 80 W output power (75 W with optional harmonic filter)	19 dB at 75 W output power	
Gain 40 dB min; 64 dB typ. at 3 dB backoff from rated CW power RF Level Adjust Rarge 0 to 30 dB (via PN diode attorusto) typ. 0.1 dB steps Gain Stability ± 0.25 dB/24-hour max, at constant drive and temperature, after 30-minute warmup Small Signal Gain Variation 4 dB pLepk max, across the 4.2 GHz band 5 dB pLepk max, across the 5.2 GHz band 1 dB pLepk max, across the 4.2 GHz band 3.0 dB max, over any 250 MHz 1.5 dB pLepk max, over any 250 MHz Input/Output VSW 1.3.1 max. 2.0.1 max, operational; any value for operation without damage Phase Noise 2.0.1 max, operational; any value for operation without damage Adv/SWR 1.5 dB below IESS-308 continuous mask; 45 dB cAC fundamenti; 50 dBs cum of all spurs Adv/Romersion 0.5 dB with harmonic filter option -60 dBc Noise Density < 0.50 dBW/4 kHz below 31.4 GHz; <-150 dBW/4 kHz from 37.5 to 42.5 GHz; <-70 dBW/4 kHz max, in pasband	Spectral Regrowth		-30 dBc max. at rated CW power with linearizer		
RF Level Adjust Ranger 0 to 30 dB (via PIN clode attenuator) typ, 0.1 dB steps Gain Stability =0.25 dB/24-hour max, at constant drive and temperature, after 30-minute warmup Small Signal Gain Variation 4 dB kyck max, across the 4.2 GHz band 5 dB pk-pk max, cores any 1 GHz band; 1.5 dB pk-pk max, over any 150 Hz band; 1.6 dB kyck max, over any 250 MHz Input/Output VSW 1.3.1 max. Load VSWR 2.0.1 max, operational; any value for operation without damager Phase Nois 1.5 dB bolow IESS 308 continuous mask; 45 dBc AC fundamental; 50 dBc sum of all spurs AM/PM Conversion 2.5% dB max, for a single-carrier up to 4 dB OBO from rated CW power with linearizer) Harmonic Output 2.5% dB max, for a single-carrier up to 4 dB OBO from rated CW power with linearizer) Harmonic Output -4.150 dBV/dW kHz bolow 31.4 GHz; <-150 dBV/d kHz from 37.5 to 42.5 GHz; <-70 dBV/d kHz max, in passband	Gain		60 dB min; 64 dB typ. at 3 dB backoff from rated CW power		
Gain Stability ±0.25 dB/24-hour max, at constant drive and temperature, after 30-minute warmup Small Signal Gain Variation 4 dB pk-pk max. across the 4.2 GHz band 5 dB pk-pk max. across the 5.2 GHz band Input/Output VSWR 1.3 dB pk-pk max. over any 250 MHz 3.0 dB max. over any 10Hz band; 1.5 dB pk-pk max. over any 250 MHz Input/Output VSWR 2.0.1 max. operational; any value for operation without damage Phase Noise 2.0.1 max. operational; any value for operation without damage MVPM Conversion 2.0.9 dB max. for a single-carrier up to 4 dB OBC form tated CW power (atted CM power with linearizer) More Density -15 dB below IESS-308 continuous mask; 45 dBc AC fundamental; 50 dBK und of all spurs MVPM Conversion 2.9 dB max. for a single-carrier up to 4 dB OBC form 37.5 to 42.5 GHz; <-70 dBW/4 kHz max. in passband	RF Level Adjust Range		0 to 30 dB (via PIN diode attenuator) typ, 0.1 dB steps		
Small Signal Gain Variation 4 dB pk-pk max. across the 4.2 GHz band 5 dB pk-pk max. over any 1 GHz band; 1. dB pk-pk max. over any 1 GHz band; 1. dB pk-pk max. over any 250 MHz 3.0 dB max. over any 1 GHz band; 1.30 pk pk max. over any 250 MHz Input/Output VSWR 1.31 max. 2.0:1 max. operational; any value for operation without damage Phase Noise 2.0:1 max. operational; any value for operation without damage 5.00 Bc sum of all spurs AM/PM Conversion 2.59/dB max. for a single-carrier up to 4 dB 080 from rate CV power with linearizer) 4.00 dBc Marcon Output VSWR -5.150 dBW/4 kHz below 11.4 GHz; <-150 dBW/4 kHz from 37.5 to 42.5 GHz; <-70 dBW/4 kHz max. in passband	Gain Stability		±0.25 dB/24-hour max, at constant drive and temperature, after 30-minute warmup		
Imput/Output VSWR 1.3:1 max. 3.0 dB max. over any 1 GHz band; 1.5 dB pk.pk max. over any 250 MHz Input/Output VSWR 1.3:1 max. 2.0:1 max. operational; any value for operation without damage Phase Noise 2.0:1 max. operational; any value for operation without damage Phase Noise 1.5 dB below IESS-308 continuous mask; 45 dBc AC fundametral; 50 dBc sum of all spurs AMVPM Conversion 2.5% dB max. for a single-carrier up to 4 dB OBO from rated CW power with linearizer) Harmonic Output -6.0 dBc with harmonic filter option -60 dBc Noise Density -5.150 dBW/4 kHz below 31.4 GHz; <150 dBW/4 kHz for 0.5. GHz; <70 dBW/4 kHz max. in passband	Small Signal Gain Variation		4 dB pk-pk max. across the 4.2 GHz band	5 dB pk-pk max. across the 5.2 GHz band	
Input/Output VSWR 1.3:1 max. Load VSWR 2.0:1 max. operational; any value for operation without damage Phase Noise -15 dB below IESS-308 continuous mask; 45 dBc AC fundamental; 50 dBc sum of all spurs AM/PM Conversion 2.5% dB max. for a single-carrier up to 4 dB OBO from rate-VV power (at rated CW power with linearizer) Harmonic Output -60 dBc with harmonic filter option -60 dBc Noise Density - - -60 dBc with Atmonic filter option -60 dBc Noise Density - <td< td=""><td colspan="2"></td><td>2.5 dB max. over any 1 GHz band; 1 dB pk-pk max. over any 250 MHz</td><td>3.0 dB max. over any 1 GHz band; 1.5 dB pk-pk max. over any 250 MHz</td></td<>			2.5 dB max. over any 1 GHz band; 1 dB pk-pk max. over any 250 MHz	3.0 dB max. over any 1 GHz band; 1.5 dB pk-pk max. over any 250 MHz	
Load VSWR 2.0:1 max. operational; any value for operation without damage Phase Noise -15 dB below IESS-308 continuous mask; -45 dBc AC fundamental; -50 dBc sum of all spurs AM/PM Conversion 2.59/dB max. for a single-carrier up to 4 dB CBO from rated CW power (at rated CW power with linearizer) Harmonic Output -60 dBc with harmonic filter option -60 dBc Noise Density <15 d BW/W kHz below 31.4 GHz; <150 dBW/4 kHz from 37.5 to 42.5 GHz; <70 dBW/4 kHz max. in passband	Input/Output VSWR		1.3:1 max.		
Phase Noise -15 dB below IESS-308 continuous mask; -45 dBc AC fundamental; -50 dBc sum of all spurs AM/PM Conversion 2.5°/dB max. for a single-carrier up to 4 dB OBO from rated CW power (at rated CW power with linearizer) Harmonic Output -60 dBc with harmonic filter option -60 dBc Noise Density <	Load VSWR		2.0:1 max. operational; any value for operation without damage		
AM/PM Conversior 2.5%/dB max. for a single-carrier up to 4 dB OB O from rated CW power (at rated CW power with linearizer) Harmonic Output -60 dBc with harmonic filter option -60 dBc Noise Density <-150 dBW/4 kHz below 31.4 GHz; <-150 dBW/4 kHz from 37.5 to 42.5 GHz; <-70 dBW/4 kHz max. in passband	Phase Noise		-15 dB below IESS-308 continuous mask; -45 dBc AC fundamental; -50 dBc sum of all spurs		
Harmonic Output -60 dBc with harmonic filter option -60 dBc Noise Density <	AM/PM Conversion		2.5º/dB max. for a single-carrier up to 4 dB OBO from rated CW power (at rated CW power with linearizer)		
Noise Density < <150 dBW/4 kHz below 31.4 GHz; <150 dBW/4 kHz from 37.5 to 42.5 GHz; <-70 dBW/4 kHz max. in passband	Harmonic Output		-60 dBc with harmonic filter option	-60 dBc	
Group Delay (over 40 MHz) 0.01 ns/MHz linear max; 0.001 ns/MHz2 parabolic max; 0.5 ns pk-pk ripple max. Primary Power Voltage: Single phase, 100-240 VAC ± 10%; Frequency: 47-63 Hz Power Consumptior 1100 VA max Power Factor 0.95 min; 0.99 typ. MECHANICAL SPE/EFICATIONS Forced air with integral blower Cooling Forced air with integral blower RF input WR22 cover flange waveguide (WR19 optional) WR19 cover flange waveguide RF output WR22 grooved flange waveguide (WR19 optional) WR19 grooved flange waveguide M&C Interface Ethernet (serial interface optional - RS232/422) WR19 grooved flange waveguide Dimensions, W x H x 10.25 x 11.37 x 22.25 inches (261 x 289 x 566 mm) Inc.5 x 11.37 x 22.25 inches (261 x 289 x 566 mm) Weight 65 lbs (29.5 kg) nominal, with options ENVIRONMENTAL Forced on the standard adiabatic derating of 2°C/1000 ft. operating; 50,000 ft. non-operating Ambient Temperature 4.0°C to +55°C operating in direct sunlight (to +60°C out of ft. operating; 50,000 ft. non-operating Ino.5 x 11.37 x 22.5 ing. 5 to 500 Hz (non-operating; 50,000 ft. non-operating Relative Humidity 20,000 ft. with standard adiabatic derating of 2°C/1000 ft. operating; 50,000 ft. non-operating Shock and Vibrature 20,000 tt. with standard adiabatic derating of 2°C/1000 ft. operati	Noise Density		<-150 dBW/4 kHz below 31.4 GHz; <-150 dBW/4 kHz from 37.5 to 42.5 GHz; <-70 dBW/4 kHz max. in passband		
Primary Power Voltage: single phase, 100-240 VAC ±10%; Frequency: 47-63 Hz Power Consumptiv 1100 VA max Power Factor 0.95 min; 0.99 typ. MECHANICAL SPUTCATIONS Soften dirigital dispersion Cooling Forced air with integral blower Connections Re input MR22 cover flange waveguide (WR19 optional) WR19 cover flange waveguide Re output MR22 grooved flange waveguide (WR19 optional) WR19 cover flange waveguide WR19 cover flange waveguide M&C Interface Re output 1.85 mm coaxial, female WR19 cover flange waveguide M&C Interface 6.165 mm coaxial, female VR19 cover flange waveguide VR19 cover flange waveguide M&C Interface 0.10.25 x 11.37 x 22.25 inches (25 x 289 x 566 mm) VR19 cover flange waveguide VR19 cover flange waveguide Meight 10.25 x 11.37 x 22.25 inches (26 1 x 289 x 566 mm) Soften (20 x 20	Group Delay (over 40 MHz)		0.01 ns/MHz linear max; 0.001 ns/MHz2 parabolic max; 0.5 ns pk-pk ripple max.		
Power Consumpti/1100 VA maxPower Factor0.95 min; 0.99 typ.MECHANICAL SPECIATIONSCoolingForced air with integral blowerMinitegral blowerOrced air with integral blowerMR fuputVR22 cover flange waveguide (WR19 optional)WR19 cover flange waveguideMR outputWR22 cover flange waveguide (WR19 optional)WR19 cover flange waveguideMR outputWR22 grooved flange waveguide (WR19 optional)WR19 grooved flange waveguideMR outputMR outputMR outputMR outputMR outputMS outputSe for coasial, femaleInterstore set (Se for coasial, femaleInterstore set (Se for coasial, femaleMR output (Se for for coasial, femaleInterstore set (Se for coasial, femaleInterstore set (Se for for for coasial, femaleInterstore set (Se for	Primary Power		Voltage: Single phase, 100-240 VAC ±10%; Frequency: 47-63 Hz		
Power Factor 0.95 min; 0.99 typ. MECHANICAL SPECIFICATIONS Cooling Forced air with integral blower R WR22 cover flange waveguide (WR19 optional) WR19 cover flange waveguide RF output WR22 grooved flange waveguide (WR19 optional) WR19 grooved flange waveguide RF output WR22 grooved flange waveguide (WR19 optional) WR19 grooved flange waveguide M&C Interface Ethernet (serial interface optional - RS232/422) Dimensions, W × H × D 10.25 x 11.37 x 22.25 inches (261 x 289 x 566 mm) Veight 65 lbs (29.5 kg) nominal, with options ENVIRONMENTAL SPECIFICATIONS 40°C to +55°C operating in direct sunlight (to +60°C out of direct sunlight); -54°C to +71°C non-operating Ambient Temperature -40°C to +55°C operating in direct sunlight (to +60°C out of direct sunlight); -54°C to +71°C non-operating Relative Humidity 1000% condensing Altitude 10,000 ft. with standard adiabatic derating of 2°C/1000 ft. operating; 50,000 ft. non-operating Shock and Vibration 20 G, 11 ms 1/2 sine; 2.1 g _{mu} , 5 to 500 Hz (non-operational) Heat Dissipation 1000 W max.	Power Consumption		1100 VA max		
MECHANICAL SFICATIONS Cooling F input Forced air with integral blower Connections RF input VR22 cover flange waveguide (WR19 optional) WR19 cover flange waveguide RF output VR22 grooved flange waveguide (WR19 optional) WR19 grooved flange waveguide M&C Interface RF output 1.85 mm coaxial, female WR19 grooved flange waveguide M&C Interface Ethernet (serial interface optional - RS232/422) Interface Interface Statistication (Statistication	Power Factor		0.95 min; 0.99 typ.		
CoolingForced air with integral blowerRF inputVR22 cover flange waveguide (WR19 optional)WR19 cover flange waveguideRF outputVR22 grooved flange waveguide (WR19 optional)WR19 grooved flange waveguideM&C InterfaceI.85 mm coaxial, femaleM&C InterfaceEthernet (serial interface optional - RS232/422)Dimensions, W × T0.10.25 x 11.37 x 22.25 inches (261 x 289 x 566 mm)Veight50 ls (29.5 kg) nominal, with optionsKWRONMENTX65 ls (29.5 kg) nominal, with optionsFORVIRONMENTX	MECHANICAL SPECIFICATIONS				
RF input VR22 cover flange waveguide (VR19 optional) VR19 cover flange waveguide RF output VR22 growed flange waveguide (VR19 optional) VR19 growed flange waveguide RF output monitor 1.85 mm coaxial, female VR19 growed flange waveguide M&C Interface Ethernet (serial interface optional - RS232/422) Image: Second Sec	Cooling		Forced air with integral blower		
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RF output monitor 1.85 mm coaxial, female M&C Interface Ethernet (serial interface optional - RS232/422) Dimensions, W x H x D 10.25 x 11.37 x 22.25 inches (261 x 289 x 566 mm) Weight 65 lbs (29.5 kg) nominal, with options ENVIRONMENTAL SPECIFICATIONS -40°C to +55°C operating in direct sunlight (to +60°C out of direct sunlight); -54°C to +71°C non-operating Ambient Temperature -40°C to +55°C operating in direct sunlight (to +60°C out of direct sunlight); -54°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 and Vibration 20 G, 11 ms 1/2 sine; 2.1 g _{rms} , 5 to 500 Hz (non-operational) Heat Dissipation 1000 W max.		RF output	WR22 grooved flange waveguide (WR19 optional)	WR19 grooved flange waveguide	
M&C InterfaceEthernet (serial interface optional - RS232/422)Dimensions, W x H x D10.25 x 11.37 x 22.25 inches (261 x 289 x 566 mm)Weight65 lbs (29.5 kg) nominal, with optionsENVIRONMENTAL SPECIFICATIONSAmbient Temperature-40°C to +55°C operating in direct sunlight (to +60°C out of direct sunlight); -54°C to +71°C non-operatingRelative Humidity100% condensingAltitude10,000 ft. with standard adiabatic derating of 2°C/1000 ft. operating; 50,000 ft. non-operatingShock and Vibration20 G, 11 ms 1/2 sine; 2.1 g _{rms} , 5 to 500 Hz (non-operational)Heat Dissipation1000 W max.		RF output monitor	1.85 mm coaxial, female		
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ENVIRONMENTAL SPECIFICATIONS Ambient Temperature -40°C to +55°C operating in direct sunlight (to +60°C out of direct sunlight); -54°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 and Vibration 20 G, 11 ms 1/2 sine; 2.1 g _{rms} , 5 to 500 Hz (non-operational) Heat Dissipation 1000 W max.	Weight		65 lbs (29.5 kg) nominal, with options		
Ambient Temperature -40°C to +55°C operating in direct sunlight (to +60°C out of direct sunlight); -54°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 and Vibration 20 G, 11 ms 1/2 sine; 2.1 g _{ms} , 5 to 500 Hz (non-operational) Heat Dissipation 1000 W max.	ENVIRONMENTAL	SPECIFICATIONS			
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Altitude 10,000 ft. with standard adiabatic derating of 2°C/1000 ft. operating; 50,000 ft. non-operating Shock and Vibration 20 G, 11 ms 1/2 sine; 2.1 g _{rms} , 5 to 500 Hz (non-operational) Heat Dissipation 1000 W max.	Relative Humidity		100% condensing		
Shock and Vibration 20 G, 11 ms 1/2 sine; 2.1 g _{rms} , 5 to 500 Hz (non-operational) Heat Dissipation 1000 W max.	Altitude		10,000 ft. with standard adiabatic derating of 2°C/1000 ft. ope	arating; 50,000 ft. non-operating	
Heat Dissipation 1000 W max.	Shock and Vibratio	n	20 G, 11 ms 1/2 sine; 2.1 g _{rms} , 5 to 500 Hz (non-operational)	20 G, 11 ms 1/2 sine; 2.1 g _{rms} , 5 to 500 Hz (non-operational)	
	Heat Dissipation		1000 W max.		
Acoustic noise oo dbA as measured at 3 teet, nom.	Acoustic noise		68 dBA as measured at 3 feet, nom.		



Power Electronics: Amplifier Products

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