

CPI GaNLink™ Ku-Band KRFU for Satellite Uplink Communications

Provides 50 watts of linear power in an ARINC-791 compliant package, digital ready, for satellite service within the Ku-band frequency range. Designed for IFEC applications.

Rugged and Easy to Maintain

Built-in fault diagnostic capability via remote monitor and control. User-friendly microprocessor-controlled logic with integrated Ethernet computer interface.

Meets Global Requirements

In addition to ARINC 791 compliance, CPI's SB50UAA is DO-160 certified (by 3rd party STC holder/OEM). Suitable for OEM Linefit and Retrofit application.

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 model SB50UAA, Ku-band Solid State KRFU, provides up to 50 watts of linear power at the flange

OPTIONS

- Integral fan or SPUD (ship provided cooling) configurations

Specification		CPI Model SB50UAA – 50 W Ku-Band GanLink™ KRFU
ELECTRICAL SPECIFICATIONS		
Output Frequency	13.75 to 14.50 GHz	
L-Band Input Frequency	950 to 1700 MHz	
Linear Output Power	47 dBm min. (BPSK 0.2, 1.8 Mbps, OccBW ≤ 2.088 MHz, +25°C)	
Gain	68 dB min.	
Gain Flatness(25°C)	1 dB max. over any 40 MHz, 2.5 dB max. full band	
Gain Stability(overtemp, freqset)	±1.50 dB	
Input Return Loss(50ohms)	-14 dB max.	
Output Return Loss	-15 dB max.	
Phase Noise	-32 dBc/Hz at 10 Hz -62 dBc/Hz at 100 Hz -72 dBc/Hz at 1 kHz -82 dBc/Hz at 10 kHz -92 dBc/Hz at 100 kHz -102 dBc/Hz at 1 MHz -112 dBc/Hz at 10 MHz -112 dBc/Hz at 100 MHz	
External Reference	10 MHz (-3 to +6 dBm)	
Phase Noise (External Reference)	-100 dBc/Hz at 10 Hz -130 dBc/Hz at 100 Hz -150 dBc/Hz at 1 kHz -155 dBc/Hz at 10 kHz -155 dBc/Hz at 100 kHz -155 dBc/Hz at 1 MHz	
Spurious	-60 dBc (excluding 2 MHz around the carrier); -30 dBc (line frequency and harmonics); -36 dBc (excluding line frequency and harmonics)	
Harmonic Output	-60 dBc	
Noise Power Density	<-70 dBW/4 kHz in passband; <-140 dBW/4 kHz over Rx band 10.95 to 12.75 GHz	
Primary Power	97 to 134 VAC single phase, 360 to 800 Hz.	
Power Consumption	500 W max.	
Heat Dissipation	350 W max.	
MECHANICAL SPECIFICATIONS		
Connections	RF input: TNC (F); RF output: N-Type (F); External reference connection: TNC (F)	
M&C Interface	Ethernet (SNMP, Telnet, Web); Serial RS422	
Dimensions, WxHxD	456.2 x 230.0 x 74.9 mm	
Weight	10 kg max.	
ENVIRONMENTAL SPECIFICATIONS		
Ambient Temperature	-15°C to +55°C Operating; -40°C to +55°C short term (de-rated) operation	
Relative Humidity	DO-160G, Section 6.0, Category B (DO-160 Certified by 3rd party STC holder/OEM)	
Water Proofness	DO-160G, Section 10, Category Y (DO-160 Certified by 3rd party STC holder/OEM)	
Altitude	DO-160G, Section 4, Category A3 (DO-160 Certified by 3rd party STC holder/OEM)	
Cooling	Spud; Cooling Fan (optional)	
Shock, Crash Safety	DO-160G, 6G, 11ms Category B (DO-160 Certified by 3rd party STC holder/OEM)	
Vibration	DO-160G, Category R and Curve B3&B4, Category H and Curve R (DO-160 Certified by 3rd party STC holder/OEM)	



SMP Division
Satcom Products
 Tel +1 (650) 846-2900
 Email: satcommarketing@cpii.com
 Web: www.cpi.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.

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