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KU-BAND · GAN

400W SSPA

400W L-to-Ku Band Block Up Converter is based on GaN technology. Maximum power solution designed for reliable operation in the toughest outdoor environments.



400W	GaN	42 kg	2000W
OUTPUT POWER	TECHNOLOGY	WEIGHT	POWER DRAW

KEY FEATURES

- Output frequency 13.75 – 14.75 GHz (EXT) / 14.50 GHz (STD)
- Local oscillator: 12.80 GHz
- GaN technology: high efficiency, low power consumption and high reliability
- Power consumption: 2000W max.
- Auto-ranging power supply: 220V 50Hz AC
- Internal high-stability 10 MHz reference (optional)
- RoHS compliant · For civil use only

Technical Specifications

GANSAT-400WKU

RF Frequency	13.75 – 14.50 GHz
Local Oscillator	12.80 GHz
Output Power	400W (+56 dBm)
IF Connector	N-type or F-type
Power Supply	220V 50Hz AC, 2000W typ.
Output Interface	WR-75 G
Gain	72 dB min, 78 dB nominal
IMD3 (Two Tones)	-26 dBc max. 2 signals 5 MHz apart at P-LINEAR
L.O. Leakage	-45 dBm max
Spurious	-50 dBc max
Spectral Regrowth	-30 dBc (QPSK at 1.5x and OQPSK at 1.0x symbol rate offset with 2dB back-off)
External Reference Requirement	Via IF cable — 10 MHz (sine-wave), -5 to +5 dBm @ input port
TX Gain Variation / Temperature Stability	± 0.5 dB over 40 MHz / ± 1.8 dB over full band / ± 1.5 dB typ., ± 1.8 dB max.

Phase Noise	-55 dBc/Hz @ 10 Hz · -65 @ 100 Hz · -75 @ 1 kHz · -85 @ 10 kHz · -95 @ 100 kHz · -115 @ 1 MHz
Noise Power Density TX / RX	-80 dBm/Hz (max) / -125 dBm/Hz (max)
Noise Figure	15 dB max
Input / Output V.S.W.R.	2:1 max
Mute	SSPA Shutdown on L.O. Unlock
Operating / Storage Temperature	-40°C to +55°C / -55°C to +85°C
Dimensions	450 (L) × 400 (W) × 220 (H) mm — 17.7" × 15.8" × 8.65"
Weight	42 kg (92.59 lbs) max

GANSAT-400WEXTKU

RF Frequency	13.75 – 14.75 GHz
Local Oscillator	12.80 GHz
Output Power	400W (+56 dBm)
IF Connector	N-type or F-type
Power Supply	220V 50Hz AC, 2000W typ.
Output Interface	WR-75 G
Gain	72 dB min, 78 dB nominal
IMD3 (Two Tones)	-26 dBc max. 2 signals 5 MHz apart at P-LINEAR
L.O. Leakage	-45 dBm max
Spurious	-50 dBc max
Spectral Regrowth	-30 dBc (QPSK at 1.5x and OQPSK at 1.0x symbol rate offset with 2dB back-off)
External Reference Requirement	Via IF cable — 10 MHz (sine-wave), -5 to +5 dBm @ input port
TX Gain Variation / Temperature Stability	± 0.5 dB over 40 MHz / ± 1.8 dB over full band / ± 1.5 dB typ., ± 1.8 dB max.
Phase Noise	-55 dBc/Hz @ 10 Hz · -65 @ 100 Hz · -75 @ 1 kHz · -85 @ 10 kHz · -95 @ 100 kHz · -115 @ 1 MHz
Noise Power Density TX / RX	-80 dBm/Hz (max) / -125 dBm/Hz (max)
Noise Figure	15 dB max
Input / Output V.S.W.R.	2:1 max
Mute	SSPA Shutdown on L.O. Unlock
Operating / Storage Temperature	-40°C to +55°C / -55°C to +85°C
Dimensions	450 (L) × 400 (W) × 220 (H) mm — 17.7" × 15.8" × 8.65"
Weight	42 kg (92.59 lbs) max