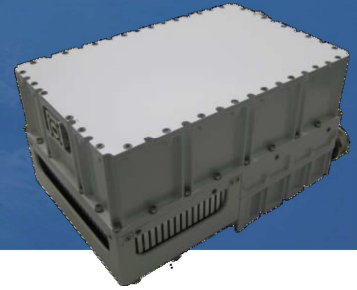


Ka BAND BUC 20W GaN Medium Power Series

ACTX-Ka20W-Ex-V4



ACTX-Ka series is designed for Ka-band satellite communication systems. These transmitters are integrated with power supply, phase locked oscillator, power amplifier and frequency converter. Temperature alarm and power supply shutdown at high temperature conditions are integrated to protect them from permanent damages. Each BUC is tested over specified temperature range, assuring very good gain stability and high reliability. Additionally, output power detection is available through M&C communication protocol.

TRANSMITTER

Input Frequency	950 to 2000 MHz (see options)
Input VSWR (50Ω)	< 1.5:1
Output Frequency	27.5 to 31 GHz (see options)
Output VSWR (50Ω)	< 1.3:1
Spectrum Inversion	None

Characteristics @ 25°C	Psat (typ)	Plin (min)	Gain	Power Consumption	Size (LxWxH)	Weight
ACTX-Ka20W-Ex-V4	43.0dBm	40.0dBm	65dB min	150W (Plin)	200x130x100mm 7.9x5.1x3.9 in	3.5 Kg 7.7lbs

Gain Flatness over the whole channel bandwidth	±2 dB
Gain flatness over any 40MHz	±0.5 dB
Gain Stability over 24 hours	±0.25 dB
Gain Stability over temperature	±1.5 dB over the whole range
Attenuation adjustment range	30 dB (0.25dB steps)
Mute	>60 dB
Output noise Power Density	<-85dBm/Hz (TX) <-150dBm/Hz (RX)
Spurious @ Plin	<-60 dBc
Spectral Regrowth @Plin	<-30 dBc
Third Order intermodulation products @ Plin	QPSK at 1.0 x rate offset from carrier <-25dBc (Δf=5MHz relative to combined Power of 2 carriers)

Output Phase noise (IESS-308/309 – 5dB)

100Hz	-65dBc/Hz
1Kz	-75dBc/Hz
10KHz	-85dBc/Hz
100KHz	-95dBc/Hz
External reference (Mux on L-Band input)	10MHz/ 0dBm ± 5dB

ENVIRONMENT

Storage Temperature	-40 to +85°C
Operating Temperature	-20 to +60°C
Relative humidity	up to 100%
Operating altitude	up to 4500m

PHYSICAL

DC Input Voltage	48VDC
Interfaces	
TX input (L Band+ Ext. Ref)	Type N(F) 50Ω
TX output (Ka-band)	WR28 grooved
M&C	D38999/20FC35SN
Power supply.....	D38999/20FB98PN
Finish.....	RAL9003 (white)

OPTIONS

MP1	AC Power Supply 85-265VAC (200x130x110mm)
MP2	Internal reference (Automatic external selection on presence)
MP3	Op. Temp. -40 to +60°C (gain variation ±2 dB)
MP4	Ethernet Interface (TCP/IP)
MP5	SNMP Agent

Ka-band output	L-band input	LO frequency	Standard frequency option
29.5 to 30.0 GHz	950 to 1450 MHz	28.55 GHz	ACTX-Ka20W-E2-V4
30.0 to 31.0 GHz	950 to 1450 MHz	29.05 GHz	ACTX-Ka20W-E6-V4
30.0 to 31.0 GHz	1000 to 2000 MHz	29.00 GHz	ACTX-Ka20W-E66-V4

Based on ACORDE DATASHEET actx-ka_mp Ed.14 from 05/10/16

