SINGLE / DUAL Ka-BAND BUC 40W

ACTX-Ka40W-Ex-V5

Medium Power Compact GaN Series

Ed.05
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The **ACTX-Ka family** of BUCs is designed for the most challenging Ka-band **professional & military** satellite communication systems (ground, SOTP, SOTM, maritime, etc.). Latest technology is applied to obtain the best power efficiency, phase noise, gain stability and linear power according to **MIL-STD-188-164B**. The ACTX-Ka family is a **high reliability** solution designed for **harsh environmental conditions**, with every single production unit **fully tested** in an environmental chamber and delivered with a complete factory acceptance test report.

TRANSMITTER SPECIFICATIONS

Input frequency	950 to 2000 MHz (see options)
Input L-Band VSWR (50 Ω)	< 1.5:1
Output frequency	27.5 to 31.0 GHz (see options)
Output Ka-band VSWR (50 Ω)	< 1.3:1
Spectrum inversion	None
Max. input level without damage	+10 dBm
Psat (typ)	46.0 dBm
Plin (min)	43.0 dBm
Gain @ Plin	65 dB min
Gain flatness	±2.0 dB over whole BW ±0.5 dB over 40 MHz
Gain stability (24 hours)	±0.25 dB @ const. temp.
Gain variation over temperature	±1.5 dB
Attenuation adjustment range	30 dB with 0.25 dB steps
Mute	> 60 dB
Output noise power density	< -80 dBm/Hz (27.5-31.0 GHz) < -150 dBm/Hz (17.7-21.2 GHz)
Power detection accuracy	±1.0 dB (Psat to Psat –20 dB)
Spurious @ Plin	< -60 dBc
SR @ Plin	< -30 dBc (MIL-STD-188-164B)
TOI @ Plin	< -25 dBc (MIL-STD-188-164B)

LOCAL OSCILLATOR

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

100 Hz	-65 dBc/Hz
1 kHz	-75 dBc/Hz
10 kHz	-85 dBc/Hz
100 kHz	-95 dBc/Hz
External reference	10MHz
External reference level	0 dBm ± 5 dB

POWER SUPPLY

AC input voltage	85-265 V_{AC} (47-63 Hz)
Consumption	250 W @ Plin

MECHANICAL SPECIFICATIONS

Size (LxWxH)	190 x 140 x 125 mm 7.5 x 5.5 x 4.9 in
Weight	5.0 kg 11.0 lbs
Finish	RAL 9003 (White)

ENVIRONMENTAL SPECIFICATIONS

Storage temperature	-40 ºC to +85 ºC
Operating temperature	-20 ºC to +60 ºC
Relative humidity	up to 100%
Operating altitude	up to 3000 m

INTERFACES

TX input (L-Band + Ext. Ref.)	Type N(F) 50 Ω
TX output (Ka-Band)	WR28 grooved (PBR 320)
M&C (RS232/485)	62IN12E12-14S-4-622
M&C (Ethernet/SNMP)	62IN12E12-8S-4-622 (as option)
Power supply	62IN12E12-3P-4-622

All mating connectors provided

OPTIONS

Ka-band output	L-band input	LO freq.	Standard freq. option
29.5 to 30.0 GHz	950 to 1450 MHz	28.550 GHz	ACTX-Ka40W-E2-V5
30.0 to 31.0 GHz	1000 to 2000 MHz	29.000 GHz	ACTX-Ka40W-E66-V5
29.0 to 30.0 GHz 30.0 to 31.0 GHz	1000 to 2000 MHz	28.000 GHz 29.000 GHz	ACTX-Ka40W-E31-V5

MP1	48 V_{DC}
MP2	Internal reference Auto external selection on presence
MP3	Operating temperature -40 ºC to +60 ºC Gain variation ±2.0 dB
MP4	Ethernet interface (TCP/IP)
MP5	SNMP Agent

Any other frequency band or custom specification available under request. Please, contact factory. Specifications are subject to change without notice.

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