



The **ACMB-X family** of BUCs is designed for the most challenging X-band **professional & military** satellite communication systems (ground, SOTP, SOTM, maritime, etc.). Latest technology is applied to obtain the best linearity, phase noise, gain stability and linear power according to **MIL-STD-188-164B**. The ACMB-X 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 1450 MHz
Input L-Band VSWR (50 Ω) .....	< 1.5:1
Output frequency .....	7.9 to 8.4 GHz
Output X-band VSWR (50 Ω) .....	< 1.3:1 (external waveguide isolator)
Spectrum inversion .....	None
Max. input level without damage .....	0 dBm
P1dB (min) .....	50.0 dBm
Gain .....	74 dB min
Gain flatness .....	±1.5 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 .....	20 dB with 0.5 dB steps
Mute .....	> 50 dB
Noise figure .....	≤ 15 dB @ max. gain
Output noise power density.....	< -80 dBm/Hz (7.25-7.75 GHz)
Spurious @ P1dB .....	< -60 dBc
Harmonics @ P1dB .....	< -50 dBc
TOI @ P1dB - 3 dB .....	< -25 dBc (2 tones Δf=5 MHz)
Sample port .....	-40 dBc ± 2 dB

#### LOCAL OSCILLATOR

Output phase noise (IESS-308/309 – 8 dB)	
100 Hz .....	-70 dBc/Hz
1 kHz .....	-78 dBc/Hz
10 kHz .....	-88 dBc/Hz
100 kHz .....	-110 dBc/Hz
External reference .....	10 MHz
External reference level.....	0 dBm ± 3 dB

#### POWER SUPPLY

AC input voltage .....	85-265 V <sub>AC</sub> (47-63 Hz)
Consumption .....	650 W @ P1dB

#### MECHANICAL SPECIFICATIONS

Size (LxWxH) .....	320 x 207 x 145 mm 12.6 x 8.1 x 5.7 in
Weight .....	10.0 kg 22.0 lbs
Finish .....	RAL 9003 (White)

#### ENVIRONMENTAL SPECIFICATIONS

Storage temperature .....	-40 °C to +85 °C
Operating temperature.....	-20 °C to +60 °C
Relative humidity .....	up to 95%
Operating altitude .....	up to 3000 m

#### INTERFACES

TX input (L-Band + Ext. Ref.) .....	Type N(F) 50 Ω
TX output (X-Band) .....	WR112 CPRG flange
Output sample (X-Band) .....	Type SMA(F) 50 Ω
M&C (RS232/485).....	62IN12E12-14S-4-622
M&C (Ethernet/SNMP) .....	62IN12E12-8S-4-622 (as option)
AC Power supply .....	62IN12E12-3P-4-622
DC Power supply .....	62IN12E12-8P-4-622 (as option)

*All mating connectors provided*

#### OPTIONS

X-band output	L-band input	LO freq.	Standard freq. option
7.9 to 8.4 GHz	950 to 1450 MHz	6.950 GHz	ACMB-X100W-E1-V2

MP1 .....	48 V <sub>DC</sub>
MP2 .....	Internal reference Auto external selection on presence
MP3 .....	Operating temperature -40 °C to +60 °C Gain variation ±2.0 dB
MP4 .....	Ethernet interface (TCP/IP)
MP5 .....	SNMP Agent