



The **ACMB-X** family of SSPBs 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-188-164C**. 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) .....	46.0 dBm
Gain .....	67 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 (±2.0 dB option LP3)
Attenuation adjustment range .....	30 dB with 0.5 dB steps
Mute .....	> 50 dB
Noise figure .....	≤ 15 dB @ max. gain
Output noise power density .....	< -94 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 .....	-45 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 ± 5 dB

### POWER SUPPLY

DC input voltage .....	48 V <sub>DC</sub>
Consumption .....	300 W @ P1dB

### MECHANICAL SPECIFICATIONS

	DC supply	AC supply
Size (LxWxH) .....	345 x 160 x 85 mm 13.6 x 6.3 x 3.3 in	391 x 160 x 85 mm 15.4 x 6.3 x 3.3 in
Weight .....	4.7 kg 10.4 lbs	5.0 kg 11.0 lbs
Finish .....	NATO green	

### 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)
DC Power supply .....	62IN12E12-8P-4-622
AC Power supply .....	62IN12E12-3P-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-X40W-E1-V1

LP1 .....	85-265 V <sub>AC</sub> (47-63 Hz)
LP2 .....	Internal reference (Auto external on p)
LP3 .....	Operating temperature -40 °C to +60 °C
LP4 .....	Ethernet interface (TCP/IP)
LP5 .....	SNMP Agent
LP6 .....	24 V <sub>DC</sub>