

# ACMB-X100W-E1-V1

X-band SSPB 100 W Zeus Series with detachable power supply

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 power efficiency, 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.



- ✓ AC supply operation
- ✓ External and internal reference capabilities
- ✓ Standard M&C with serial port (RS-232/485) with optional Ethernet and SNMPv2
- ✓ High linearity performance and spurs rejection
- ✓ Low power consumption

## ZEUS

The king of the Gods. God of the sky and thunder watches over and governs the Universe, like our line of SSPBs, a reference in the world market, with an excellent SWAP ratio for different frequency bands and output powers.

## Transmitter

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
Spectrum inversion	None
Max. input level without damage	0 dBm
P1dB	> 50.0 dBm
Gain	> 74 dB
Gain flatness	±1.5 dB over whole BW ±0.5 dB over 40 MHz
Gain stability (24 hours)	±0.25 dB @ constant T
Gain variation over temperature	±1.5 dB ±2.0 dB @ option T
Attenuation adjustment range	30 dB with 0.5 dB steps
Mute	> 50 dB
Noise figure @ max gain	< 15 dB
Output noise power density	< -80 dBm/Hz (7.25-7.75 GHz)
Power detection accuracy	±1.0 dB (Psat to Psat - 20 dB)
Spurious @ P1dB	< -60 dBc
Harmonics @ P1dB	< -50 dBc
TOI @ P1dB - 3 dB (2 tones Δf=5 MHz)	< -25 dBc
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	

## Environmental

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

## Mechanical

Size (LxWxH)	320 x 207 x 145 mm 12.6 x 8.1 x 5.7 in
Weight	10.5 kg 23.1 lbs
Finish	NATO green

## Power Supply

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

## Interfaces

TX input (L-band + Ext. Ref.)	Type N(F) 50 Ω
TX output (X-band)	WR112 CPRG flange
TX output sample (X-band)	Type SMA(F) 50 Ω
M&C (RS-232/485)	62INI2EI2-14S-4-622
M&C (Ethernet/SNMPv2) as option	62INI2EI2-8S-4-622
Power supply	62INI2EI2-3P-4-622

All mating connectors provided

## Order information

Part-number	Input	Output	LO frequency
ACMB-X100W-EI-V1	950 - 1450 MHz	7.9 - 8.4 GHz	6.950 GHz

## Options

Option R	Internal reference (Auto external on presence)
Option T	Operating temperature -40 °C to +60 °C
Option E	Ethernet interface (TCP/IP)
Option S	SNMPv2 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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