

ACTX-X150W-E1-V1

X-band SSPB 150 W Zeus Series high linearity & gateways

The ACTX-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 ACTX-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	+10 dBm
PIdB (typ)	51.8 dBm
Gain	> 72 dB
Gain flatness	±1.5 dB over whole BW ±0.75 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	20 dB with 0.5 dB steps
Mute	> 50 dB
Noise figure @ max gain	< 15 dB
Output noise power density	< -155 dBm/Hz (7.25-7.75 GHz)
Power detection accuracy	±1.0 dB (P _{sat} to P _{sat} - 20 dB)
Spurious @ PIdB	< -60 dBc
Harmonics @ PIdB	< -50 dBc
TOI @ PIdB - 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)	495 x 265 x 255 mm 19.5 x 10.4 x 10.0 in
Weight	24.0 kg 52.9 lbs
Finish	RAL 9003 (White)

Power Supply

AC input voltage	85-265 V _{AC} (47-63 Hz)
Consumption @ PIdB	1200 W

Interfaces

All mating connectors provided

TX input (L-band + Ext. Ref.)	Type N(F) 50 Ω
TX output (X-band)	WR112 CPRG flange
TX output sample (X-band)	Type N(F) 50 Ω
M&C (RS-232/485)	62INI2E12-14S-4-622
M&C (Ethernet/SNMPv2) as option	62INI2E12-8S-4-622
Power supply	62INI2E12-3P-4-622

Order information

Part-number	Input	Output	LO frequency
ACTX-XI50W-EI-VI	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.

C/ El Castro 22N, 39011, Santander, Spain		
+34 942 766 44 00	www.acorde.com	sales@acorde.com