

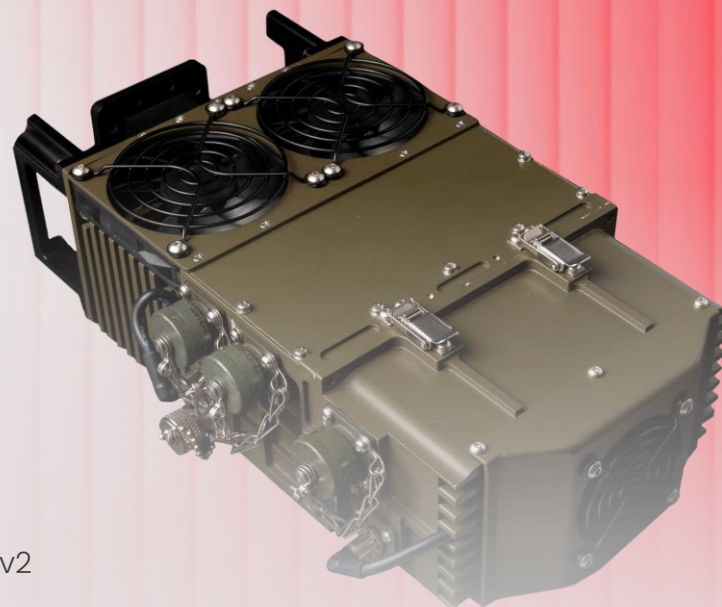
ACMB-X20W-E1-V3

X-band SSPB 20 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 |
| PIdB | > 43.0 dBm |
| Gain | > 60 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 | < -100 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 ± 5 dB |

Enviromental

| | |
|-----------------------|------------------|
| 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) | 302 x 160 x 85 mm 11.9 x 6.3 x 3.3 in |
| Weight | 4.6 kg 10.1 lbs |
| Finish | NATO green |

Power Supply

| | |
|--------------------|-----------------------------------|
| AC input voltage | 85-265 V _{AC} (47-63 Hz) |
| Consumption @ PIdB | 180 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 SMA(F) 50 Ω |
| M&C (RS-232/485) | 62IN12E12-14S-4-622 |
| M&C (Ethernet/SNMPv2) as option | 62IN12E12-8S-4-622 |
| Power supply | 62IN12E12-3P-4-622 |

Order information

| Part-number | Input | Output | LO frequency |
|-----------------|----------------|---------------|--------------|
| ACMB-X20W-EI-V3 | 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 |