

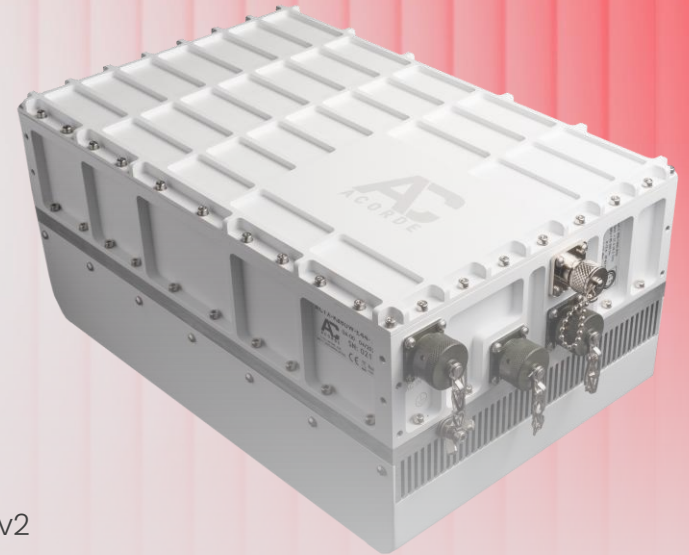
ACTX-Ka100W-Ex-V3

Single/Dual Ka-band SSPB 100 W Zeus Series

The ACTX-Ka family of SSPBs is designed for the most challenging Ka-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-Ka 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 2000 MHz |
| Input L-band VSWR (50 Ω) | < 1.5:1 |
| Output frequency | 27.5 to 31.0 GHz |
| Output Ka-band VSWR (50 Ω) | < 1.3:1 |
| Spectrum inversion | None |
| Max. input level without damage | +10 dBm |
| Psat (typ) | 50.0 dBm |
| Plin | > 47.0 dBm |
| Gain @ Plin | > 65 dB |
| Gain flatness | ±2.0 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 0.25 dB steps |
| Mute | > 60 dB |
| Output noise power density | < -75 dBm/Hz (27.5-31.0 GHz) < -150 dBm/Hz (17.7-21.2 GHz) |
| Power detection accuracy | ±1.0 dB (Psat to Psat - 20 dB) |
| Spurious @ Plin | < -60 dBc |
| SR @ Plin per MIL-STD-188-164C | < -30 dBc |
| TOI @ Plin per MIL-STD-188-164C | < -25 dBc |

Local Oscillator

| | | |
|--|--------------|------------|
| Output phase noise (IESS-308/309 - 5 dB) | | |
| | 100 Hz | -65 dBc/Hz |
| | 1 kHz | -75 dBc/Hz |
| | 10 kHz | -85 dBc/Hz |
| | 100 kHz | -95 dBc/Hz |
| External reference | 10 MHz | |
| External reference level | 0 dBm ± 5 dB | |

Environmental

| | |
|-----------------------|------------------|
| Storage temperature | -40 °C to +85 °C |
| Operating temperature | -20 °C to +60 °C |
| Relative humidity | up to 100% |
| Operating altitude | up to 3000 m |

Mechanical

| | |
|--------------|---|
| Size (LxWxH) | 340 x 220 x 165 mm 13.4 x 8.7 x 6.5 in |
| Weight | 14.0 kg 30.9 lbs |
| Finish | RAL 9003 (White) |

Power Supply

| | |
|--------------------|-----------------------------------|
| AC input voltage | 85-265 V _{AC} (47-63 Hz) |
| Consumption @ Plin | 650 W |

Interfaces

All mating connectors provided

| | |
|---------------------------------|------------------------|
| TX input (L-band + Ext. Ref.) | Type N(F) 50 Ω |
| TX output (Ka-band) | WR28 grooved (PBR 320) |
| 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-Ka100W-E2-V3 | 950 - 1450 MHz | 29.5 - 30.0 GHz | 28.550 GHz |
| ACTX-Ka100W-E6-V3 | 950 - 1950 MHz | 30.0 - 31.0 GHz | 29.050 GHz |
| ACTX-Ka100W-E66-V3 | 1000 - 2000 MHz | 30.0 - 31.0 GHz | 29.000 GHz |
| ACTX-Ka100W-E31-V3 | 1000 - 2000 MHz | 29.0 - 30.0 GHz 30.0 - 31.0 GHz | 28.000 GHz 29.000 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 |