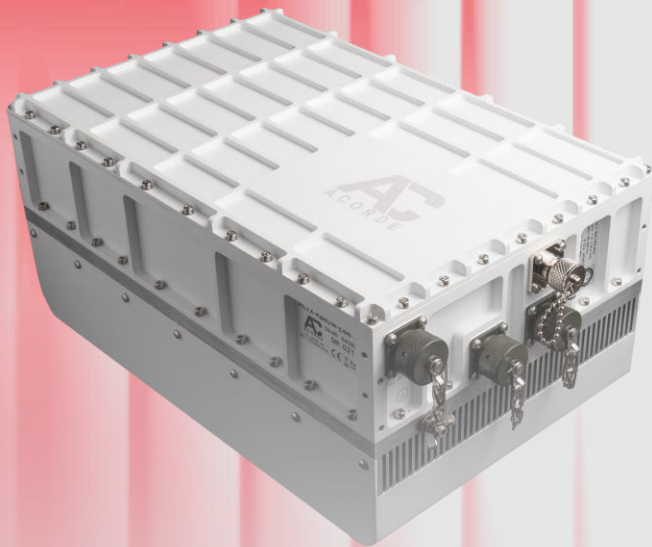


ACSH-Ka100W-Ex-V3

Ka-band SSPA 100W Hercules Series hubmount



The ACSH-Ka family of SSPAs 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 ACSH-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
- ✘ High linearity
- ✘ Extended temperature range available
- ✘ M&C with serial port (RS-232/485) and Ethernet/SNMPv2 optionally
- ✘ Compact hubmount solution
- ✘ Low power consumption

HERCULES

Son of Zeus, Hero of strength and protector of armies, he faces the hardest and most difficult battles thanks to his strength and determination. ACORDE's SSPAs have that strength and power, giving all the power needed for the highest bandwidth and high performance satellite communications covering LEO, MEO and GEO systems.

Transmitter

Input/Output frequency	27.5 to 31.0 GHz
Input/Output Ka-band VSWR (50 Ω)	< 1.5:1
Max. input level without damage	+10 dBm
Psat (typ)	50.0 dBm
Plin	> 47.0 dBm
Gain @ Plin	> 65 dB
Gain flatness	±1.0 dB over 1 GHz 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	20 dB with 0.5 dB steps
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)
Output sample port	-40 dBc ± 2 dB
Spurious @ Plin	< -60 dBc
SR @ Plin per MIL-STD-188-164C	< -30 dBc
TOI @ Plin per MIL-STD-188-164C	< -25 dBc
AM/PM conversión @ Plin	< 2.0°/dB
Phase noise	< IESS-308/309 - 10 dB
Group delay over 40 MHz	Linear 0.02 ns/MHz Parabolic 0.001 ns/MHz ² Ripple 0.5 ns pp

Enviromental

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	700 W

Interfaces

All mating connectors provided

TX input (Ka-band)	Type K(F) 50 Ω
TX output (Ka-band)	WR28 grooved (PBR 320)
TX output sample (Ka-band)	Type K(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
ACSH-Ka100W-E2-V3	29.5 - 30.0 GHz	29.5 - 30.0 GHz
ACSH-Ka100W-E6-V3	30.0 - 31.0 GHz	30.0 - 31.0 GHz
ACSH-Ka100W-E31-V3	29.0 - 31.0 GHz	29.0 - 31.0 GHz
ACSH-Ka100W-E59-V3	27.5 - 30.0 GHz	27.5 - 30.0 GHz

Options

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