



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.

### TRANSMITTER SPECIFICATIONS

Input/Output frequency .....	27.5 to 31.0 GHz (See options)
Input/Output Ka-band VSWR (50 Ω) .....	< 1.3:1
Max. output load without damage .....	2.0:1
Max. input level without damage .....	+10 dBm
Psat (typ) .....	56.0 dBm
Plin <sup>1</sup> (min) .....	53.0 dBm
Plin <sup>2</sup> (min) .....	52.0 dBm
Gain @ Plin .....	70 dB min
Gain flatness .....	±1.0 dB over 1 GHz ±0.5 dB over 80 MHz
Gain stability (24 hours) .....	±0.25 dB @ const. temp.
Gain variation over temperature .....	±1.5 dB
Attenuation adjustment range .....	20 dB with 0.1 dB steps
Output noise power density .....	< -75 dBm/Hz (27.5-30.0 GHz) < -155 dBm/Hz (17.7-20.2 GHz)
Power detection accuracy .....	±1.0 dB (Psat to Psat - 20 dB)
Spurious & Harmonics @ Plin .....	< -60 dBc
SR @ Plin <sup>1</sup> .....	< -30 dBc (MIL-STD-188-164C)
TOI @ Plin <sup>1</sup> .....	< -25 dBc (MIL-STD-188-164C)
NPR @ Plin <sup>2</sup> .....	< -19 dB
AM/PM conversion @ Plin <sup>1</sup> .....	< 2.0 °/dB
Phase noise .....	< IESS-308/309 - 10 dB
Group delay over any 80 MHz	
Linear .....	0.01 ns/MHz
Parabolic .....	0.001 ns/MHz <sup>2</sup>
Ripple .....	0.5 ns pp
Input monitor .....	-20 dBc ± 2 dB
Output monitor .....	-50 dBc ± 2 dB

### POWER SUPPLY

AC input voltage .....	85-265 VAC (47-63 Hz)
Consumption .....	2500 W @ Plin <sup>1</sup> (TBC)

### MECHANICAL SPECIFICATIONS

Size (LxWxH) .....	548 x 237 x 267 mm 21.6 x 9.3 x 10.5 in
Weight .....	39.0 kg 86.0 lbs
Finish .....	RAL 9003 (White)

### ENVIRONMENTAL SPECIFICATIONS

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

### INTERFACES

TX input (Ka-Band) .....	K-Type (F) 50 Ω
TX output (Ka-Band) .....	WR34 grooved (PBR 260)
Input monitor (Ka-band) .....	K-Type (F) 50 Ω
Output monitor (Ka-band) .....	K-Type (F) 50 Ω
M&C (RS232/485) .....	62IN12E12-14S-4-622
M&C (Ethernet/SNMP) .....	62IN12E12-8S-4-622
Power supply .....	ACA3102E16-10PBA232

*All mating connectors provided*

### OPTIONS

Ka-band output	Ka-band input	Standard freq. option
27.5 to 30.0 GHz	27.5 to 30.0 GHz	ACSH-Ka400W-E59-V2
30.0 to 31.0 GHz	30.0 to 31.0 GHz	ACSH-Ka400W-E6-V2