



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)	< 1.5:1
Max. input level without damage	+10 dBm
Psat (typ)	50.0 dBm
Plin (min)	47.0 dBm
Gain @ Plin	65 dB min
Gain flatness	±1.0 dB over whole BW ±0.5 dB over 40 MHz
Gain stability (24 hours)	±0.25 dB @ const. temp.
Gain variation over temperature	±1.5 dB (±2.0 dB option HP3)
Attenuation adjustment range	20 dB with 0.5 dB steps
Output noise power density	< -80 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	< -30 dBc (MIL-STD-188-164C)
TOI @ Plin	< -25 dBc (MIL-STD-188-164C)
AM/PM conversion @ Plin	< 2.0 °/dB
Phase noise	< IESS-308/309 - 10 dB
Group delay over any 40 MHz	
Linear	0.02 ns/MHz
Parabolic	0.001 ns/MHz ²
Ripple	0.5 ns pp

POWER SUPPLY

AC input voltage	85-265 V _{AC} (47-63 Hz)
Consumption	700 W @ Plin typ.

MECHANICAL SPECIFICATIONS

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)

ENVIRONMENTAL SPECIFICATIONS

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

INTERFACES

TX input (Ka-Band)	K-Type (F) 50 Ω
TX output (Ka-Band)	WR28 grooved (PBR 320)
Sample TX output (Ka-Band)	K-Type (F) 50 Ω
M&C (RS232/485)	62IN12E12-14S-4-622
M&C (Ethernet/SNMP)	62IN12E12-8S-4-622 (as option)
Power supply	62IN12E12-3P-4-622

All mating connectors provided

OPTIONS

Ka-band output	Ka-band input	Standard freq. option
29.5 to 30.0 GHz	29.5 to 30.0 GHz	ACSH-Ka100W-E2-V3
30.0 to 31.0 GHz	30.0 to 31.0 GHz	ACSH-Ka100W-E6-V3
29.0 to 31.0 GHz	29.0 to 31.0 GHz	ACSH-Ka100W-E31-V3
27.5 to 30.0 GHz	27.5 to 30.0 GHz	ACSH-Ka100W-E59-V3

HP3	Operating temperature -40 °C to +60 °C
HP4	Ethernet interface (TCP/IP)
HP5	SNMP Agent