

Ku-BAND HUBMOUNT SSPA

ACSH-Ku-LC Medium Power Series Low Cost
(40, 80 & 100W)



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ACSH-Ku-LC series consist of integrated RF Solid State Power Amplifiers (SSPA) low cost. ACSH-Ku-LC series of hubmount SSPA are ideal to work with X-band rackmount up-converters.

All products in this series has been tested and calibrated between -40 and +60°C, so they assure very good gain stability with temperature. ACSH-Ku-LC also includes a temperature alarm and power supply shutdown to protect the amplifier from permanent damages in high temperature conditions. ACSH-Ku-LC allows communication through RS-232 or RS-485 as standard with TCP/IP and SNMP as option.

SPECIFICATIONS

Maximum input level without damage	+10 dBm
Input impedance	50 Ohms
Input VSWR	<1.3:1
Output frequency (*1)	14.0 – 14.5 GHz (Standard Ku-band)
.....	13.75 – 14.5 GHz (Extended Ku-band)
Output impedance.....	50 Ohms
Output VSWR.....	<1.3:1
Output sample	-40 dBc ± 2 dB

Transmit Characteristics @ 25°C	P1 dB (typ.)	Gain	Power Consumption	Size (LxWxH)	Weight
ACSH-Ku40W-LC	46.0 dBm	70 dB min	390 W	360 x 265 x 235 mm	16 kg
ACSH-Ku80W-LC	49.0 dBm	70 dB min	900 W	495 x 265 x 255 mm	25 kg
ACSH-Ku100W-LC	50.0 dBm	70 dB min	1000 W	495 x 265 x 255 mm	25 kg

Gain flatness over the whole bandwidth.....	± 1dB
Gain flatness over 40 MHz.....	± 0.3 dB
Gain variation over temperature	± 1.2 dB over the whole range
Noise figure.....	≤ 20 dB
Spurious	< -60 dBc at POUT=P1 dB
Harmonics	≤ -30 dBc
Third order intermodulation products	<-25 dBc 2 tones Δf=5 Mhz for Pout=P1 dB-3 dB

(*1) Other frequency bands available upon request.

▼ POWER SUPPLY

AC input voltage 110/220 VAC (47-63 Hz) (*2)
(*2) 48 VDC could be selected as option.

▼ ENVIRONMENTAL SPECIFICATIONS

Storage temperature -40 to +80°C
Operating temperature -20 to +60°C (*3)
Relative humidity up to 95%
Operating altitude up to 3500 m
(*3) Operating temperature (-40°C to +60°C) could be selected as an option.

▼ MECHANICAL SPECIFICATIONS

Interfaces:
TX input (Ku-Band): Type N(F) 50 ohm
TX output (Ku-Band): WR-75 CPRG flange
TX output sample (Ku-Band): Type N(F) 50 ohm
Power supply: MS3112E12-3P
Monitoring & Control: MS3112E12-14S
Cooling system..... Forced air integrated
Finish..... White

▼ OPTIONS

Frequency band:	Model Number
14.0 to 14.5 GHz	ACSH-Kuxxx-LC-E1-xxx
13.75 to 14.5 GHz	ACSH-Kuxxx-LC-E2-xxx

MP1: 48 VDC power supply
MP2: Operating temperature (-40 to +55°C)
MP3: Ethernet interface (TCP/IP)
MP4: SNMP Agent
MPC: Custom design

▼ PART NUMBER CONFIGURATION

EXAMPLE 1: A standalone 40 watt hubmount SSPA standard Ku-band frequency with an optional operating temperature range (-40 to +60°C):

ACSH-Ku40W-LC-E1-MP2