

C-BAND HUBMOUNT SSPA

ACSH-C-LC High Power Series (100, 200, 300 & 400W)



Ed. 04

23/09/10

ACSSH-C-C series consist of integrated RF Solid State Power Amplifiers (SSPA) low cost. ACSH-C-LC series of hubmount SSPA are ideal to work with C-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-C-LC also includes a temperature alarm and power supply shutdown to protect the amplifier from permanent damages when SSPA temperature exceeds 100°C, when the temperature go down 85° C the equipment begin work again. ACSH-C-LC allows communication through RS-232 or RS-485 as standard with TCP/IP and SNMP.

SPECIFICATIONS

Maximum input level without damage	+10 dBm
Input impedance	50 Ohms
Input VSWR	<1.3:1
Output frequency (*1).....	5.85 – 6.425 GHz (Standard C)
.....	5.85 – 6.725 GHz (Extended C)
Output impedance	50 Ohms
Output VSWR	<1.3:1
Output sample	-45 dBc ± 2 dB

Transmit Characteristics @ 25°C	P1dB (typ.)	Gain	Power Consumption	Size (LxWxH)	Weight
ACSH-C100W-LC	50.0 dBm	65 dB min	~ 800 W	495 x 265 x 255 mm	22 kg
ACSH-C200W-LC	53.0 dBm	70 dB min	~ 1300 W	495 x 265 x 255 mm	24 kg
ACSH-C300W-LC	54.7 dBm	70 dB min	~ 1500 W	495 x 265 x 255 mm	25 kg
ACSH-C400W-LC	56.0 dBm	70 dB min	~ 2500 W	605 x 450 x 245 mm	40 kg

Gain flatness over the whole bandwidth.....	± 1 dB
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=P1dB
Harmonics	≤ -30 dBc
Third order intermodulation products	<-25 dBc for 2 tones Δf=5Mhz for Pout=P1dB-3 dB

(*1) : Other frequency bands available upon request.

POWER SUPPLY

AC input voltage 110/220 VAC Autoranging (47-63 Hz)

ENVIRONMENTAL SPECIFICATIONS

Storage temperature -40 to +80°C
Operating temperature -20 to +60°C (*2)
Relative humidity up to 95%
Operating altitude up to 3500 m

(*2) Operating temperature (-40°C to +60°C) could be selected as an option.

MECHANICAL SPECIFICATIONS

Interfaces

TX input (C-band): Type N(F) 50 Ω
TX output (C-band): WR137 flange CPR137
TX output sample (C-band): Type N(F) 50 Ω
Power supply: MS3112E12-3P
Monitoring & Control: MS3112E12-14S
Cooling system Forced air integrated
Finish White

OPTIONS

Frequency band:	Model Number
5.85 to 6.425 GHz	ACSH-Cxxx-LC-E1-xxx
5.85 to 6.725 GHz	ACSH-Cxxx-LC-E2-xxx
6.725 to 7.025 GHz	ACSH-Cxxx-LC-E3-xxx
6.425 to 6.725 GHz	ACSH-Cxxx-LC-E4-xxx

HP1: Operating temperature (-40 to +60°C)
HP2: Ethernet interface (TCP/IP)
HP3: SNMP Agent
HPC: Custom design

PART NUMBER CONFIGURATION

EXAMPLE 1:

A standalone 150 watt hubmount SSPA standard C-band frequency with an optional operating temperature range (-40 to +60°C):

ACSSH-C150W-LC-E1-HP1