

DATASHEET DLNA

rev A2

X-band Low Noise Amplifier		min	typ	max	unit	note
1.0	General	The DLNA is an X-band Low Noise Amplifier designed for weak signal communication systems of the NASA Deep Space Network.				
1.1	RF frequency	8.0		8.5	GHz	
1.2	Gain		30		dB	
1.3	Noise Figure	@ 20 °C	0.5		dB	
1.3.1	Equivalent noise temperature		36		K	
1.4	Input return loss	6			dB	
1.5	Output impedance		50		Ohm	
1.6	Output return loss	10			dB	
1.7	Output P1dB	0			dBm	
1.8	Maximum RF input power	-20			dBm	
1.8	Supply voltage	9		15	V	9 V is recommended
1.9	Supply current		90		mA	
1.10	Electrical stability	unconditional			with matched ports	
1.11	Input connector	WR90 flange			no groove	
1.11.1	Input connector mounting holes	4 x M4 inner thread			can be drilled thru 4.1 mm	
1.12	Output connector	precision SMA, female				
1.13	Dimensions	105 x 41 x 19			mm	overall
1.14	Weight		150		g	
1.15	Operational temperature range	-25		+55	°C	
1.16	Humidity protection	none				