

KU LNA 8000 B WG - 1005 – Super Low Noise Preamplicifier

Technical Specifications

Electrical Specifications

Parameter	Min.	Typ.	Max.	Unit
Frequency	8000		8500	MHz
Gain		47		dB
Gain Flatness		±1		dB
Noise Figure (8.4 ... to 8.5 GHz)		0.75	0.75	dB
Input Reflection Coefficient (S11)		-7		dB
Output Reflection Coefficient (S22)		-10		dB
Output Power at 1 dB Compression (P1dB)		15		dBm
Output Third Order Intercept (IP3)		25		dBm
DC Supply Voltage	9		15	V
Supply Current (depending on DC voltage)		170		mA

Maximum Ratings

Parameter	Ratings
Operating Temperature	-40..65 °C
DC Voltage	16 V
Input RF Power	0 dBm

Permanent damage may occur if any of these limits are exceeded.

Noise figure specified at 18 °C, will increase with higher temperature.

[Link](#) to the product page online.



Mechanical Specifications

Input Connector	WR-112
Output Connector	N female
DC Connector	MS3112E10-6P
Case	milled aluminium
Dimensions (L x W x H)	117.5 mm x 80 mm x 35 mm
Weight	typ. 780 g

Applications:

Deep Space communications
Satellite ground station

Fulfilled Standards:

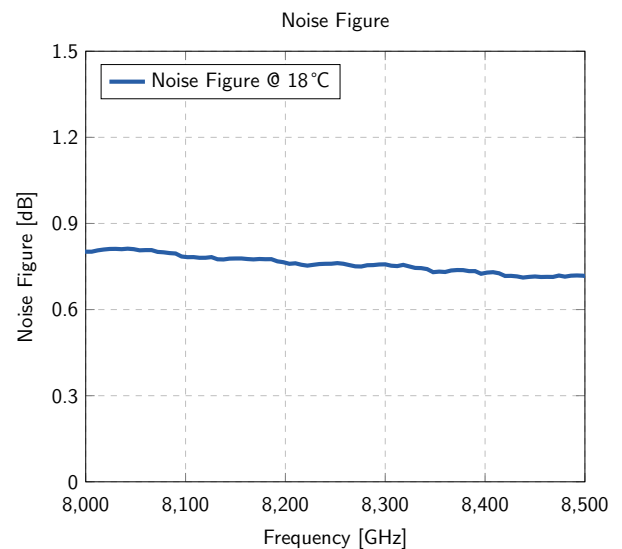
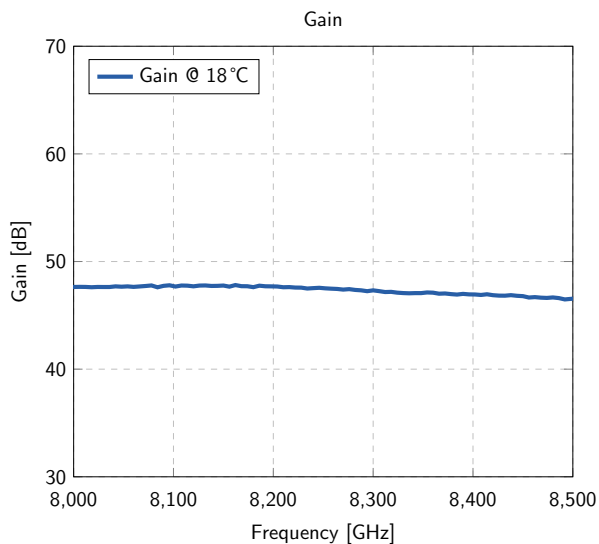
EMC directive 2014/30/EU
Low voltage directive 2014/35/EU
RoHS directive 2011/65/EU

Features:

Extremely low noise figure
Reverse polarity protection
Remote power supply via output connector

Typical Performance Data and Curves

(DC Voltage = 12V, DC Current = 170 mA)



Notice

Airtight and splash-proof case, designed for 30 mbar air pressure.

Test Certificate

Sig.: _____

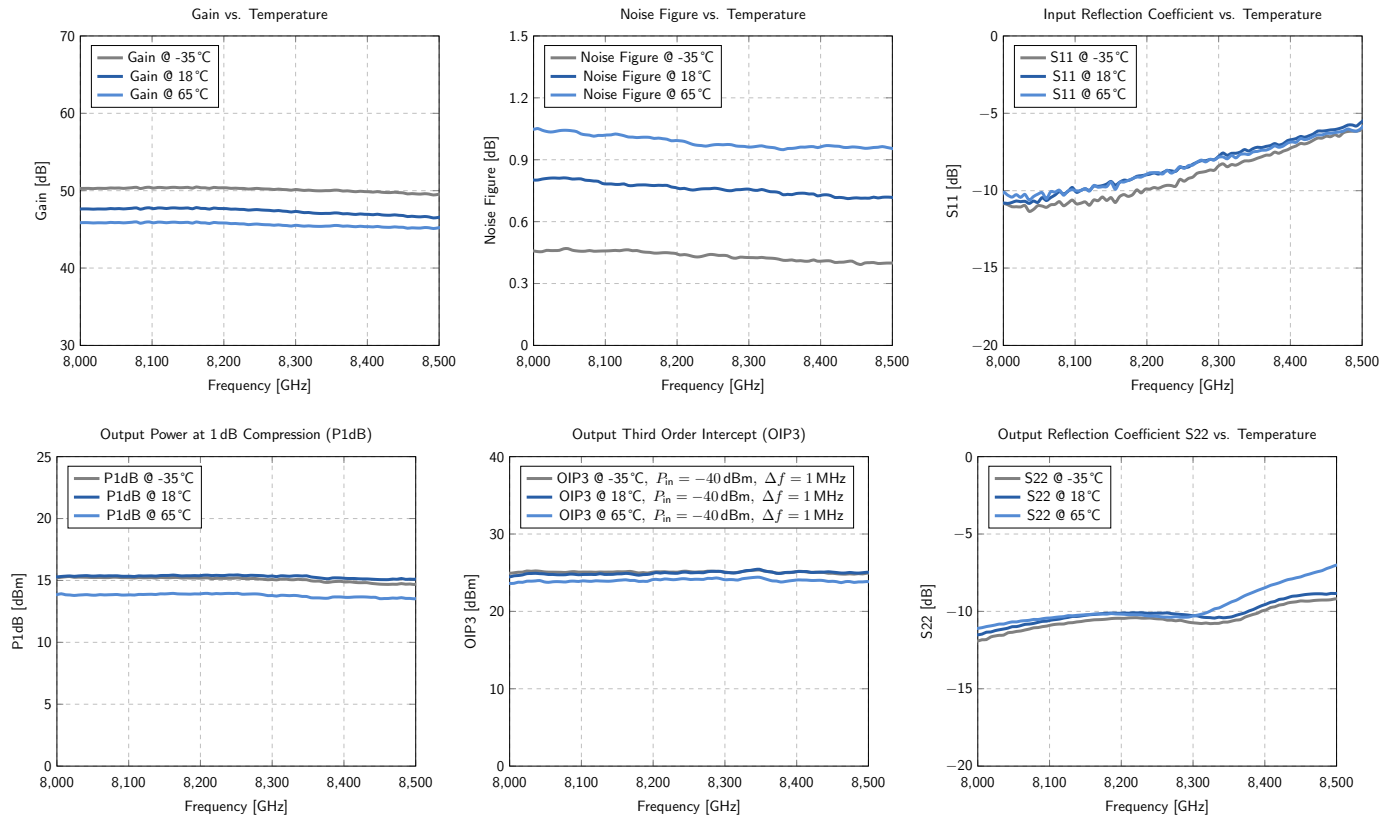
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Typical Curves

(DC Voltage = 12V, DC Current = 170 mA)



Typical Data

(DC Voltage = 12V, DC Current = 170 mA)

Frequency [MHz]	Gain [dB]	Noise Figure [dB]	S11 [dB]	S22 [dB]	P1dB [dBm]	IP3 [dBm]
8000	47.6	0.80	-10.8	-11.5	15.3	24.5
8100	47.7	0.78	-10.1	-10.6	15.3	24.8
8200	47.7	0.76	-8.98	-10.1	15.4	24.9
8300	47.3	0.76	-7.78	-10.3	15.4	25.0
8400	46.9	0.73	-6.70	-9.53	15.2	25.2
8500	46.5	0.72	-5.60	-8.85	15.1	25.1

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Outline Drawings

(Unit: mm)

