

Ka band LNA for lunar communication & radioastronomy



USING CUTTING-EDGE TECHNOLOGY, THE NEW Ka LNA FAMILY OFFERS OUTSTANDING PERFORMANCE IN OUTDOOR OPERATIONS

Innovative technology

State-of-the-art technology provides a very low noise figure at Ka band: 25.5-27 GHz, with superior performance from a highly compact unit. Waveguide input for optimal signal reception.

Efficiency & Reliability

Each unit is fully tested and delivered with a complete factory acceptance test report.

Advanced design and construction mean the equipment can be operated in the toughest environments.

Exceptional performance combined with reliability and cost effectiveness.

Configurability

The unit can operate in any orientation on movable antenna structure.



Key Features

- * Satcom and radioastronomy applications
- * Superior performance
- * High reliability & efficiency
- * Ultra-low noise figure
- * High gain & low ripple
- * Low input & output VSWR
- * Compact size & lightweight
- * Wide operating temperature range
- * Redundant configurations (1:1, 1:2, N:1)



OPTIONS

* Indoor power supply unit

* Redundant systems
1:1, 2:1, N:1

RF performance

Operating freq. range	25.5-27 GHz
Noise temperature	<155 K
Noise figure	<1.83 dB
Input VSWR	<1.6:1
Output VSWR (50 Ω)	<1.5:1
Gain	>43 dB
Gain flatness	2 dB pp max (full band) / 0.1 dB pp max (per 40 MHz)
Gain variation over temp.	0.03 dB/°C
Output P1dB	>14 dBm
3 rd OIP	>24 dBm
Group delay	<40 ps

Power supply & monitoring

Input voltage	+7 to +30 VDC
Current consumption	<150 mA @12 VDC

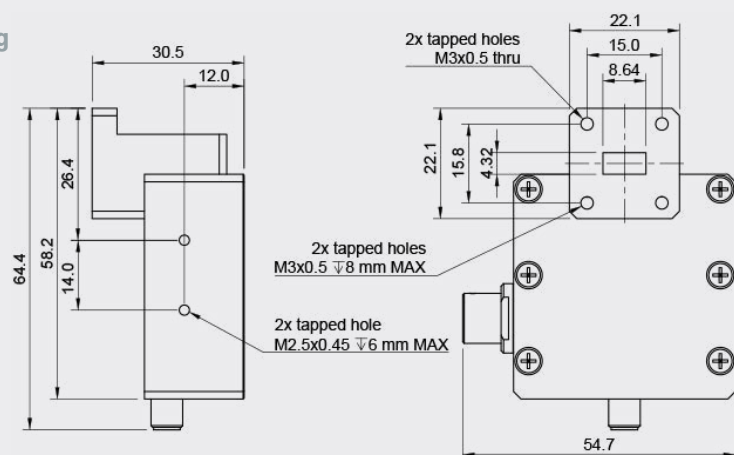
Interfaces & physical

Dimensions (L x W x H)	65 x 55 x 30 mm
Weight	120 gr
Interfaces	RF input flange: WR34
	RF output: K (f)
	DC & monitoring: DBEU 102 A051-130

Environmental

Operating temperature	-10 °C to +40 °C
Storage temperature	-40 °C to +60 °C
Humidity	100 % condensing

Outline drawing



Dimensions are in "mm" and after treatment
Tolerance according to ISO 2768-f

callisto-space.com
sales@callisto-space.com

Information contained in this document
is subject to change without notice.

Unless otherwise specifications, tests
have been done at 23 °C.