

K band LNA for lunar communication & radioastronomy



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

Innovative technology

State-of-the-art technology provides a very low noise figure at K band: 18.2-21.2 GHz, with superior performance from a highly compact unit. Waveguide input for optimal signal reception.

Efficiency & Reliability

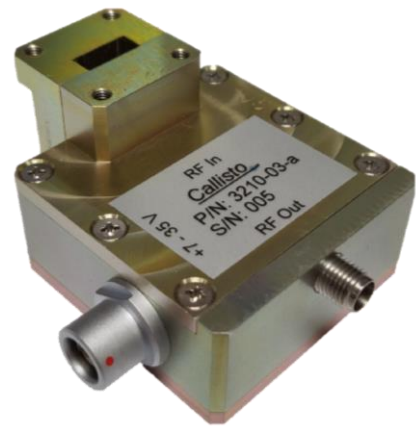
Each unit is fully tested and delivered with a complete factory acceptance test report.

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 | 18.2-21.2 GHz |
| Noise temperature | <135 K |
| Noise figure | <1.5 dB |
| Input VSWR | <1.6:1 |
| Output VSWR (50 Ω) | <1.45:1 |
| Gain | >48 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 | ±20 ps |

Power supply & monitoring

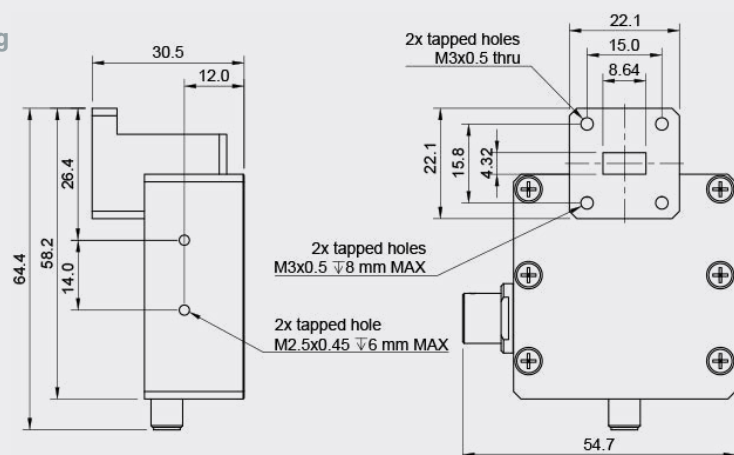
| | |
|---------------------|-----------------|
| Input voltage | +7 to +30 VDC |
| Current consumption | <100 mA @12 VDC |

Interfaces & physical

| | |
|------------------------|-----------------------------------------------------------------------------------------|
| Dimensions (L x W x H) | 65 x 55 x 30 mm |
| Weight | 120 gr |
| Interfaces | RF input flange: WR42 RF output: 2.92mm coax 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

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

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