CELESTIA | Callisto

Ambient wide band coax LNA
12-32 GHz
NF 3.0 dB max.

Ambient wide band coax LNA for SATCOM

USING **CUTTING-EDGE TECHNOLOGY,** THE AMBIENT WIDEBAND LNA OFFERS EXCEPTIONAL NOISE TEMPERATURE OVER A VERY LARGE FREQUENCY BANDWIDTH

Innovative technology

State-of-the-art technology provides a very low noise figure over a wide frequency band.

Units can be optimized for 19 - 28 GHz operation, or extended from 12-32 GHz.

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

Frequency band can be customized. SMA or K connectors available.

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

Key Features

* Radioastronomy applications
* Deep-space or lunar communications
* High reliability & efficiency
* Ultra-low noise figure
* High gain & low ripple
* Low input & output VSWR
* Wide operating temperature range

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Technical specifications

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OPTIONS

* Indoor power supply unit
* Frequencies: S, C, K, Ka26 or Ka32
* Filtering for Tx protection
* PC based automatic monitoring system
* Input/output switching redundant configurations

RF performance

Frequency band	
S / X / Ka	2.2 – 2.3 GHz / 8.4 – 8.5 GHz / 31.8 – 32.3 GHz
Noise temperature	
S / X / Ka	10 K / 11 K / 30 K
Input VSWR	>1.4:1
Gain	>55dB
Base temperature	15K
Cooldown time	5 hours
Warmup time	2 hours
Service Interval	13 000 hours
Output return loss	-17.7 dB min.

Maintenance Aspects of cryogenic LNAs

An improved maintenance concept is implemented on new cryogenic LNAs. This concept uses a sleeve system which enables the User to replace the cold head without opening the sealed enclosure.

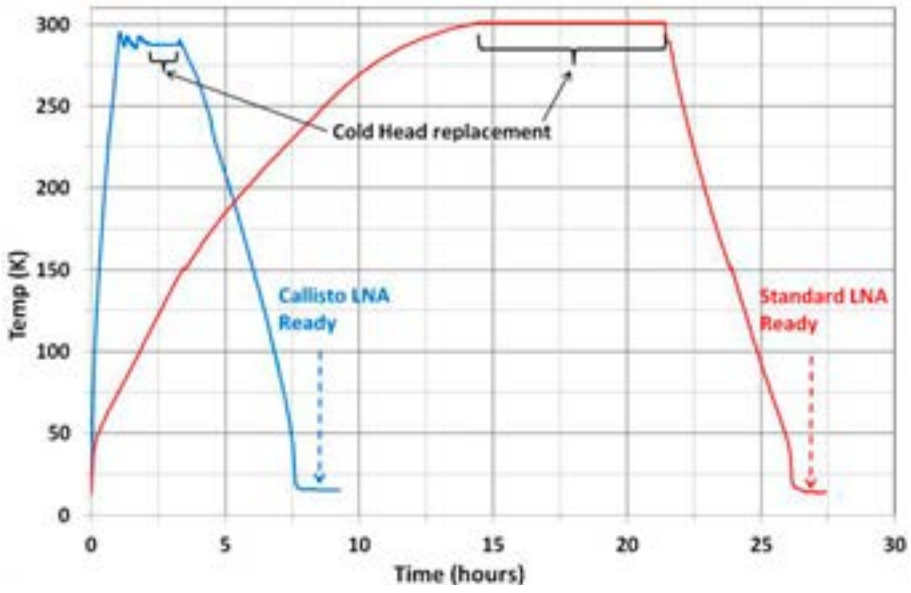
The main advantage of this concept is to drastically reduce the down-time of the operational system (from 48 hours to 12 hours) and to avoid the need for a specialist cryogenic technician on-site for services or repairs.

Thanks to the sleeve design, first-level maintenance actions can be carried out by the Users's own maintenance staff.

Interfaces & physical

Operating temperature	-10 °C to +40 °C
Storage temperature	-40 °C to +60 °C
Humidity	90 % condensing

Down time for standard and Callisto LNA



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