

Ka band redundancy plate

for **lunar communication & radioastronomy (app?)**



A PROPRIETARY WAVEGUIDE DESIGN TO ENSURE PERFECT 1:1 OR 2:1 REDUNDANCY WHILE PRESERVING RF PERFORMANCE

Innovative technology

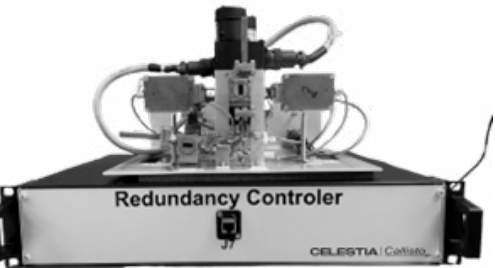
Proprietary design of LNA.
In-house integration and testing.
Extended frequency band.

Could you develop it in paragraph format instead of bullet points?

Efficiency & Reliability

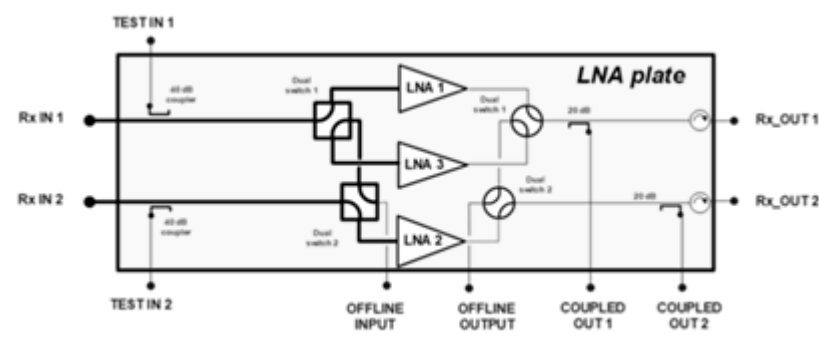
Each unit is fully tested and delivered with a complete factory acceptance test report.

Low power consumption



Key Features

- * VHTS reception system applications
- * WG connectors for minimal losses
- * Superior performance
- * High reliability & efficiency
- * Ultra-low noise figure
- * Proprietary redundancy controller



CONNECTIONS

- * 40 dB input couplers
- * 20 dB output couplers (1 per output)
- * Input waveguide interfaces are PBR220 flange
- * Output coaxial interfaces are SMA type female
- * Dual switches are latched type

RF performance (single LNA)

Operating freq. range	17.7 – 21.2 GHz
Noise temperature	120 K
Input VSWR	<1.6:1
Output VSWR (50 Ω)	<1.5:1
Gain	>50 dB
Gain flatness	+/- 1 dB full band typical
P1dB	>10 dBm
OIP3	>20 dBm
Group delay	<3.0 ns ptp
Input power	0 dBm max
Input return loss	-14 dB min
Output return loss	-17.7 dB min

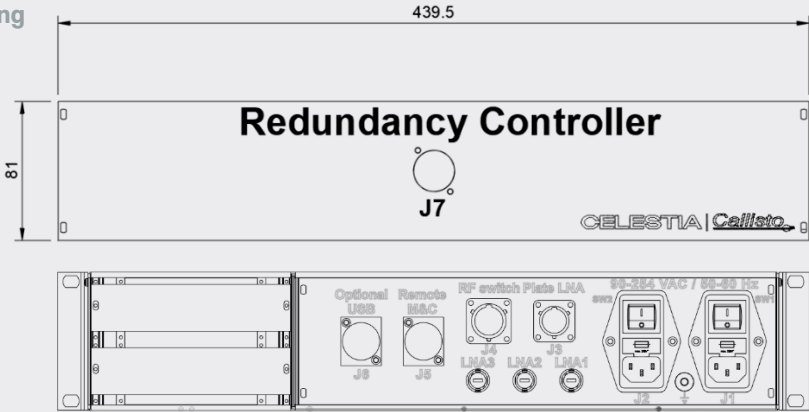
RF performance (2:1 redundant plate)

Noise temperature	130K typical shortest path / 160K typical longest path
Gain	>50 dB
Gain flatness	+/- 1 dB full band typical
P1dB	+10dBm min
OIP3	+20dBm min
Group delay	<3.0ns ptp
Input power	0 dBm max
Input return loss	-14 dB min
Output return loss	-17.7 dB min

Interfaces & physical

Dimensions (L x W x H)	195 x 250 x 206 mm
Weight	4.5 Kg

Outline drawing



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.

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