Ku-Band 10.70–12.75 GHz LNB with WR-75 Input

LCLNB106-LO2S accepts 10.70–12.75 GHz RF through WR-75 waveguide and supplies 950–2150 MHz IF through an N female connector. It uses 9.75 and 10.60 GHz local oscillators with 13/18 V selection and an internal 10 MHz reference. The source does not assign each voltage to a particular LO. Output P1dB is ≥10 dBm.



DC power is fed through the IF connector across 10–24 V, with 2.5 W typical consumption. Dimensions are 81 × 39.5 × 39.5 mm with ±0.5 mm tolerance; weight is ≤0.3 kg. The source states IP66 and –40 to +60 °C operation without supplied qualification evidence.

Port-specific VSWR and ambiguously unit-labeled phase-noise values remain withheld pending confirmation.

Electrical specifications

Parameter	Value	Unit
RF input frequency	10.70–12.75	GHz
IF output frequency	950–2150	MHz
Internal LO frequency	9.75 / 10.60	GHz
LO selection voltage	13 / 18	V
Internal reference frequency	10	MHz
Downconversion gain	≥60	dB
Gain flatness over 500 MHz	±2.0 (Bandwidth: 500 MHz.)	dB
Gain flatness over 40 MHz	±0.6 (Bandwidth: 40 MHz.)	dB
Gain variation with temperature	±2	dB
Noise figure	≤0.8	dB
Output P1dB	≥10	dBm
Output spurious	≤–55	dBc
Supply voltage	10–24	VDC
Power consumption	2.5 (Typical: 2.5 W.)	W

Environmental limits

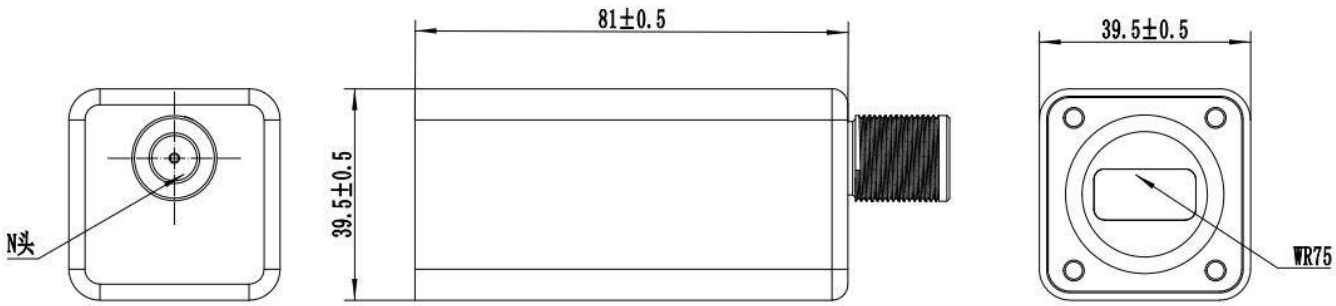
Parameter	Value	Unit
Operating temperature	–40–+60	°C
Relative humidity	≤100	% RH
Ingress protection stated in source	IP66 (IP66 is stated in the source; completed certification is not established.)	-

Interfaces and contacts

Interface	Specification
Power interface	IF (DC supply through the IF output connector.)
RF input connector	WR-75 waveguide
IF output connector	N female

Mechanical specifications

Parameter	Value	Unit
Outline dimensions	81 × 39.5 × 39.5	mm
Dimensional tolerance	±0.5	mm
Weight	≤0.3	kg



Document notice

Specifications are subject to revision. Before design release, confirm the current document revision and product-specific requirements with LCRF. The approved quotation and order documentation define the supplied configuration.