1.8–3 GHz RF Amplifier and Two-Output Distribution Module

LCLNAPD-1800-3000-2-1 covers 1800–3000 MHz. Its original functional diagram routes IN1 through an amplifier to OUT1 and OUT2. The table gives 30 dB typical gain, 8 dBm typical saturated output and signed input S11 −10 dB typical. These values are not allocated per output. Noise figure, output balance and isolation are unspecified; Psat does not establish a linear output rating.



The source specifies a 50 × 40 × 13 mm body, SMA-K female RF interfaces, feed-through DC connection and separate ground sheet. Typical supply is 5 V at 100 mA. Absolute limits are 7 V supply and 12 dBm input; operating and storage temperature ranges are −40 to +70 °C and −40 to +85 °C.

Confirm physical connector placement and mounting details before integration.

Electrical specifications

Parameter	Value	Unit
Operating frequency	1800–3000	MHz
Gain	30 (Typical)	dB
Saturated output power (Psat) [1]	8 (Typical)	dBm
Input S11 (signed source value) [2]	−10 (Typical)	dB
Supply voltage	5 (Typical)	VDC
Dynamic current	100 (Typical)	mA

[1] Saturated output (Psat), not P1dB or guaranteed linear output.

[2] Negative S11 convention retained from source; not recast as positive return loss.

Absolute maximum ratings

Parameter	Value	Unit
Absolute maximum supply voltage	≤7 (Absolute maximum rating; continuous operation or performance at this limit is not established. Maximum: 7 VDC.)	VDC
Absolute maximum input power	≤12 (Absolute maximum rating; continuous operation or performance at this limit is not established. Maximum: 12 dBm.)	dBm
Operating temperature	−40–+70	°C
Storage temperature	−40–+85	°C

Interfaces and contacts

Interface	Specification
RF input connector	SMA-K female
RF output connector	SMA-K female

Interfaces and contacts

Interface	Specification
DC supply interface	Feed-through capacitor
Ground interface	Grounding metal sheet
RF input port count	1
RF output port count	2
Signal routing	One input amplified and distributed to two outputs

Mechanical specifications

Parameter	Value	Unit
Body dimensions	50 × 40 × 13	mm

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.