Band selective High-Performance Low-Noise Amplifier for the 350 - 520 MHz band with built-in low-loss preselector

DESCRIPTION

- Covers the whole frequency range from 350 - 520 MHz.
- Built-in low-loss input preselector. Prevents amplifier overload from e.g. nearby transmitters in adjacent frequency bands:
  - Rejects the entire HF/VHF range from 0 to 240 MHz > 30 dB
  - Rejects LTE, GSM and UMTS > 30 dB
- Miniature LNA suitable for:
  - Preamplifier in receiver systems to ensure low system noise figure.
  - Preamplifier in antenna signal distribution network.
  - Compensating for high cable loss.
- Very low noise figure ensures best possible S/N ratio of weak RF signals.
- Excellent amplifier dynamic range ensure handling of strong RF signals with very low level of IM distortion.
- Low input and output VSWR ensure excellent termination of connected units (e.g. filters).
- Adjustable gain by built-in variable output attenuator.
- Low power consumption.
- Built-in voltage regulator ensures wide supply voltage range.
- DC supply on solder terminal or on 2.5 mm barrel DC connector.
- DC supply from phantom voltage on the output cable available as option (-PHDC).
- Available with N(f), SMA(f) or TNC(f) connectors.
- Low weight.
- Wide temperature range.
- Sturdy aluminium box.
- This filter is coated with black vinyl to prevent corrosion.

ORDERING

Type	Product No.
PRO-LNA-350-520-N(f)	210002216
PRO-LNA-350-520-SMA(f)	210002217
PRO-LNA-350-520-TNC(f)	210002218
ADAPTOR AC/DC, 12 VDC/500 mA EU	240000040
ADAPTOR AC/DC, 12 VDC/500 mA UK	240000041

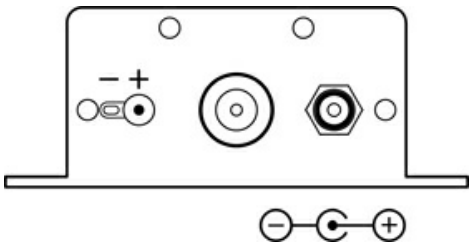
SPECIFICATIONS

Electrical	
Model	PRO-LNA-350-520-...
Frequency	350 - 520 MHz
Amp. Gain	19 dB ± 2 dB
Max. Output Power @ 1 dB Compression (P1dB)	> +17 dBm @ Max. GAIN
Noise Figure	< 1.5 dB, typ. 1.2 dB @ 23"C
Output 3. Order Intercept point (OIP3)	> +33 dBm @ Max. GAIN
Impedance	50 Ω
Input VSWR	< 1.5:1 (Output loaded with 50 ohm)
Output VSWR	Max. 1.5:1 (Input loaded with 50 ohm)
Max. Input Power (dBm)	20 dBm
Power Supply	8 - 25 VDC
Current Consumption	Typ. 75 mA
Selectivity	See GAIN/VSWR curve

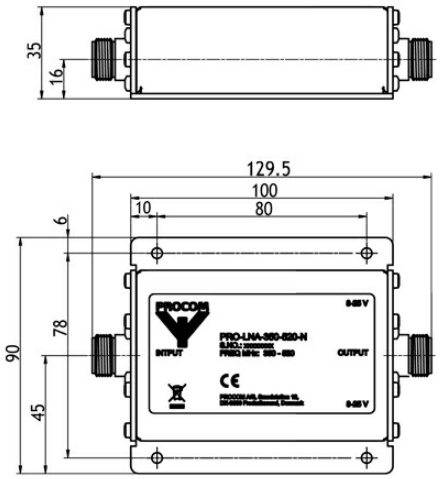
Mechanical	
Connection(s)	N(f), SMA(f) or TNC(f)
Dimensions	130 x 90 x 36 mm / 5.1 x 3.5 x 1.4 in.
Weight	0.21 kg / 0.46 lb.

Environmental	
Operating Temperature Range	-30°C to +60°C
Ingress Protection	IP31

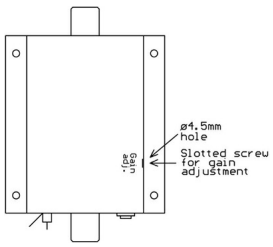
POWER SUPPLY CONNECTION



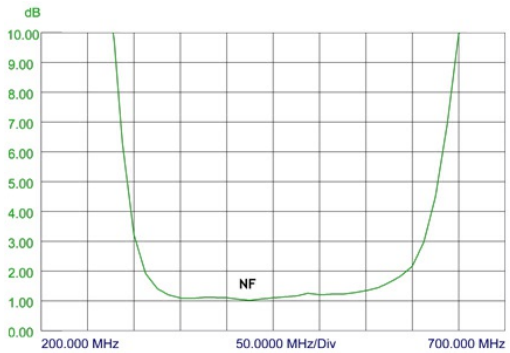
MOUNTING DETAILS



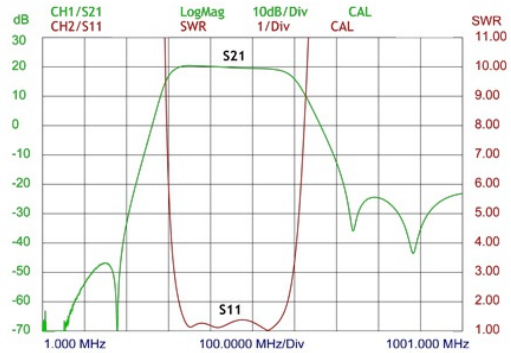
GAIN ADJUSTMENT



TYPCAL NOISE FIGURE



TYPICAL GAIN AND SWR CURVES



ADAPTOR AC/DC 12V EU - ADAPTOR AC/DC 12V UK

EU DECLARATION OF CONFORMITY

Hereby Amphenol Procom declare that the product type PRO-LNA-350-520-... is in compliance with EU Directive 2014/53/EU.

The full text of the EU Declaration of Conformity is available at:

htt://procom.dk/images/shop/catalog/pdf-for-catalouges/Declaration-of-Conformity-PRO-LNA_350-520.pdf