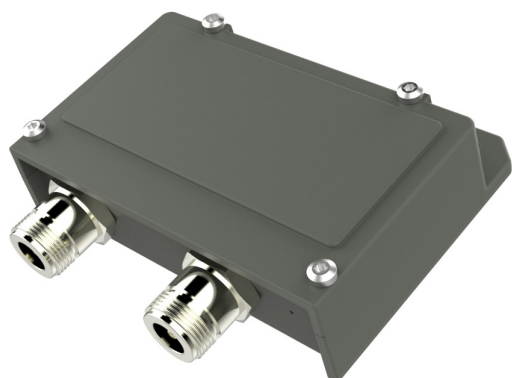


# AGC Line Amplifier

Line amplifiers Automatic gain control 0–30 dB



The AGC (Automatic Gain Control) Line Amplifier 0-30 dB is intended for situations where you need a constant level output from a LNB. Due to its very high IP3 together with the AGC it is usually possible to place the unit very close to the LNB.

Available with F-, N- or SMA-connectors. DC bypass is standard. Options include Separate DC power input via connector (F, N or SMA) or via cable (pigtail).

## Features

- AGC 0-30 dB
- High P1dB
- Compact and light weight
- Wide operating temperature range
- Several options available

## TECHNICAL SPECIFICATIONS

MODEL:	AGC Amplifier 0-30 dB
Gain typ.	0-30 dB @ 950 - 2150 MHz
Gain flatness	±0.2 dB within 30 MHz
Gain flatness	±1dB within full band
Frequency range	950-2150 MHz
Output P1dB	+17 dBm typ.
Output IP3	+33 dBm at max. gain typ.
Input IP3	+20dBm at min. gain typ.
Noise Figure / Noise Temperature	5 dB / 627 K @ max. gain, 8 dB / 1540 K @ mid. gain, 18 dB / 18008K @ min. gain.
Level Detector	Total average power level in the range 950-2150MHz
Output Level	Internally adjustable between -25dBm and +10dBm (total power). Factory preset @ 0dBm
Modulation Compatibility	PSK, QAM, FM
Input VSWR	1.9:1 typ.
Output VSWR	1.9:1 typ.
Connectors	F-type 75Ω / N-type 50Ω / SMA-type 50Ω
DC Input	+12 to +28 V, 700 mA max. through output, input or via separate port
Material & Finish	Die-cast aluminium, Powder coated
Temperature Range	-40 to +80°C
Ingress Protection Code	IP 67
Dimensions	96 x 28 x 89 mm ( N connectors )
Weight	208 g (F & SMA), 250 g (N)
Option	Separate DC input (via F / N / SMA-connector, or cable) with integrated DC-block(s)

Rev.10-20-4B

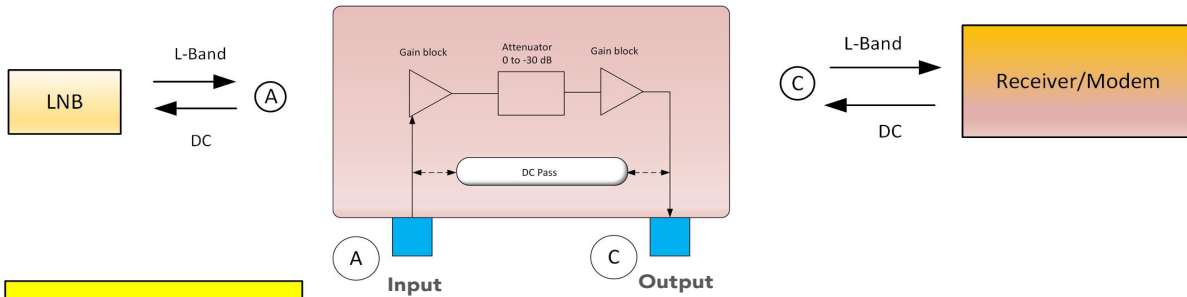
The Noise figure of an ILA Amplifier does not affect the System Noise figure much.  
 Example: LNB NF = 0,8dB and Amplifier NF = 16 dB gives System NF = 0,85 dB

Above parameters are generic product family values. For part number specific min./max. values, please consult us.

Specifications are subject to change without notice. Products from Swedish Microwave AB are made for commercial use.

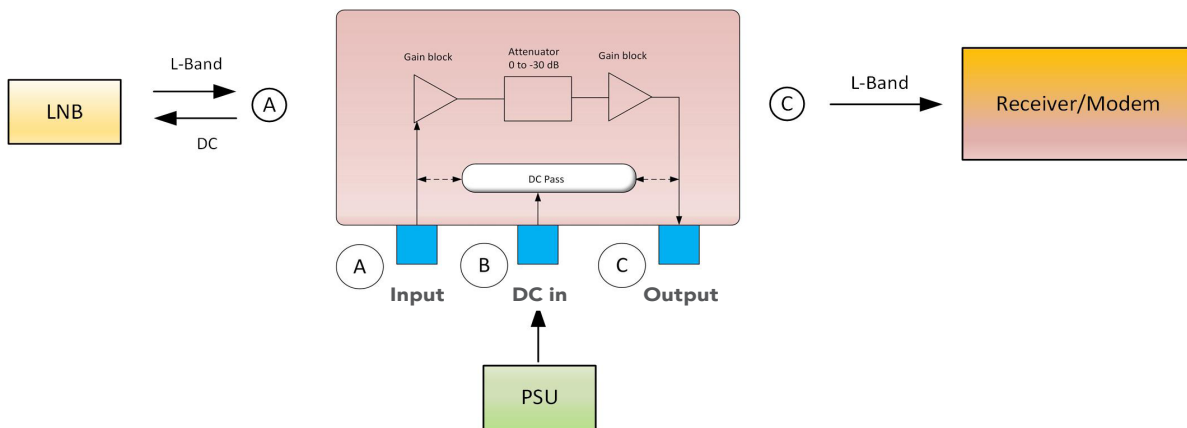
# AGC Line Amplifier examples

P/N LILA-?X?A-XXXX-02 (AGC 0-30 dB gain)



NOTE! High IP3 allows the ILA to be installed direct after or close to LNB for best performance

P/N LILA-???A-XXXX-02 (AGC 0-30 dB & Sep. DC input)



**Part number designation for the ILA AGC 0-30 dB**

Model	ILA Input connector A	Separate DC input B	ILA Output connector C	Type	DC block A	DC block C	Future use	Future use	Version
LILA				A			X	X	02

<b>A. Input conn.</b>	<b>B. DC Input</b>	<b>C. Output conn.</b>	<b>Type. AGC</b>	<b>Input (A)</b>	<b>Output (C)</b>
0 F	X No	0 F	A AGC 0 to 30 dB gain	X No block	X No block
5 N	0 F	5 N		1 DC blocked	1 DC blocked
8 SMA	5 N	8 SMA			
	8 SMA				
	9 Pigtail				

**Example:** AGC Line Amplifier with N connectors + separate DC input (pigtail) and DC block at Output = LILA-595A-X1XX-02