

Line amplifiers

Line amplifiers Automatic gain control 0–30 dB or Fixed gain 18–24 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 it's 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), 10 MHz bypass, DC-block and high current 5A bypass.

Features

- High P1dB
- Compact and light weight
- Wide operating temperature range
- Several options available

TECHNICAL SPECIFICATIONS

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MODEL:	Fixed Amplifier ILA 18-24 dB	AGC Amplifier 0-30 dB
Gain typ.	18 dB @ 950 MHz, 24 dB @ 2150 MHz	0-30 dB @ 950 MHz, 0-30 dB @ 2150 MHz
Gain flatness	±0.2 dB within 30 MHz	
Gain flatness	Slope 6 dB typ. within full band	±1dB within full band
Frequency range	950-2150 MHz	
Output P1dB	+16 dBm typ.	+25 dBm typ.
Output IP3	+26 dBm typ.	+35 dBm at max. gain typ.
Input IP3		+20dBm at min. gain typ.
Noise Figure / Noise Temperature	16 dB / 11255 K *)	5 dB / 627 K @ max. gain, 8 dB / 1540 K @ mid. gain, 18 dB / 18008K @ min. gain.
Level Detector	n/a	Total average power level in the range 950-2150MHz
Output Level	According to Input 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 +24 V, 70 mA max. (DC bypass is standard, max. 1A)	+12 to +28 V, 70 mA max. through output, input or via separate port
Material & Finish	Die-cast aluminium, Powder coated	
Temperature Range	-30 to +60°C	-40 to +80°C
Protection Class	IP 67	
Dimensions	96 x 26 x 89 mm (N connectors)	
Weight	208 g (F & SMA), 250 g (N)	
Options	Separate DC input (via F / N / SMA-connector, or via cable) with integrated DC-block(s) 10 MHz bypass (loss 1 dB) High current 5A max. bypass (this option is not possible together with 10 MHz bypass)	Separate DC input (via F / N / SMA-connector, or cable) with integrated DC-block(s) 10 MHz bypass (loss 1 dB) 22kHz bypass 1450MHz limited frequency range -5 to +25dB gain range -15 to +15dB gain range High current 5A max. bypass (this option is not possible together with 10 MHz bypass)

*) 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