AGC Line Amplifier L-Band

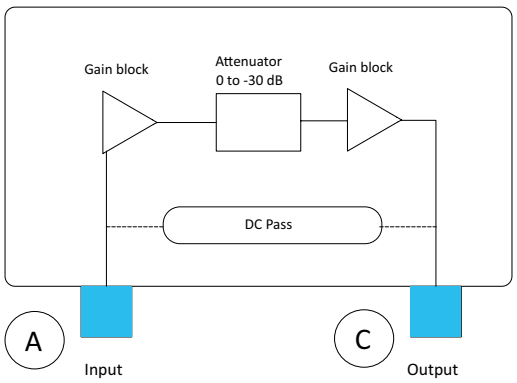
Key features

- Automatic gain 0 to 30 dB (AGC)
- Outdoor rated (IP 67)
- Wide operating temperature range
- High P1 dB and IP3
- Available with F, N or SMA connectors
- Separate DC input as option

Description
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).

Standard configuration



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Rev. 12-23-6F

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Technical specifications

GENERAL	Frequency range	950-2150 MHz
	DC input	+12 to +28 V, 700 mA max. through output, input or via separate port
	Gain typ.	0-30 dB @ 950 - 2150 MHz
	Gain Flatness	±0.2 dB within 30 MHz, ±1 dB within full band
	Output P1dB	+17 dBm typ.
	Output IP3	+33 dBm at max. gain typ.
	Input IP3	+20dBm at min. gain typ.
	Group delay	± 1 ns max.
	VSWR in/out	1.9:1 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
	Dimensions	96 x 28 x 89 mm (N connectors)
	Weight	209 g (F & SMA connectors), 249 g (N connectors)
	Temperature Range	Storage and operating: -40 to +80°C, -40 to +176°F
	MTBF	MTBF as per MIL-HDBK-217F Notice 2: Environmental Condition GF (Ground Fixed): >9000000 hours, Environmental Condition AIC (Airborne, Inhabited, Cargo): >45000000 hours, Quality level: Commercial, Temperature used for MTBF calculation: +35°C Ambient
	Ingress protecion code	IP 67
	Material & Finish	Die-cast aluminium, Powder coated
	Input connector (A)	SMA-type 50Ω female, N-type 50Ω female or F-type 75Ω female
	Output Connector (C)	SMA-type 50Ω female, N-type 50Ω female or F-type 75Ω female
	Options	Separate DC input (via F / N / SMA-connector, or cable) with integrated DC-block(s)

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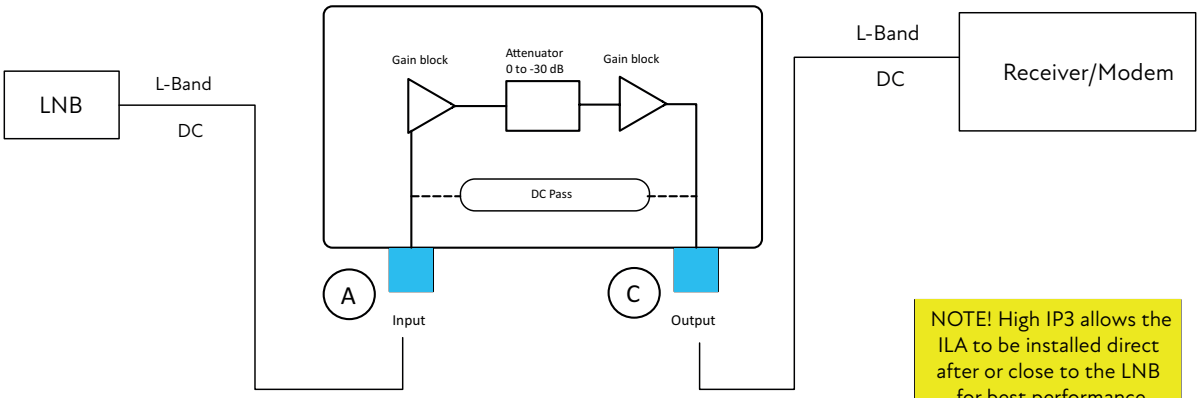
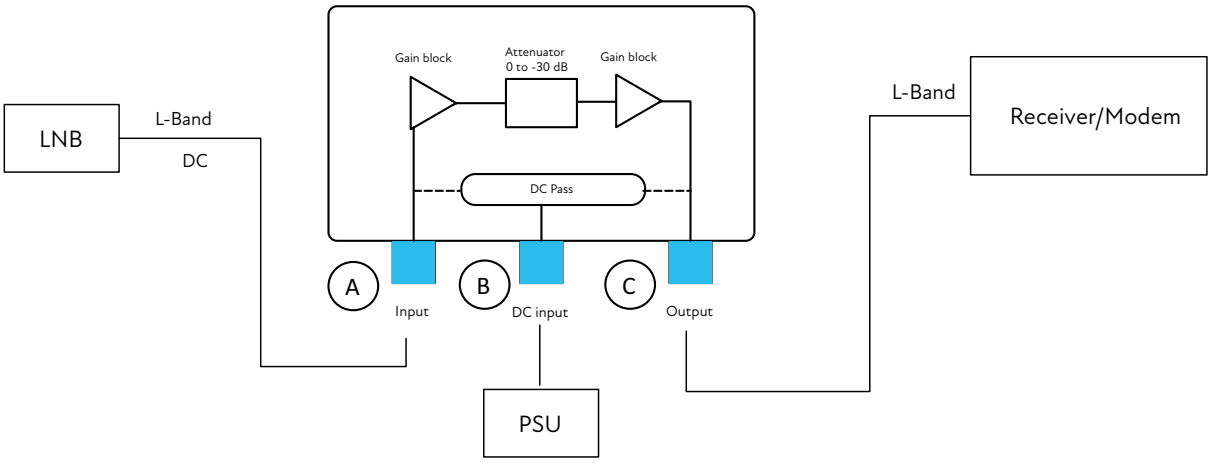
Installation examples

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 the 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		Sep. DC input B		ILA output Connector C		Type			DC Block A		DC Block C		Future use	Future use		Version
LILA	-	?		?		?		A		-	?		?		X	X	-	02
		0	F	X	No	0	F	A	AGC 0-30 dB gain		X	No DC block						
		5	N	0	F	5	N				1	DC Block						
		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

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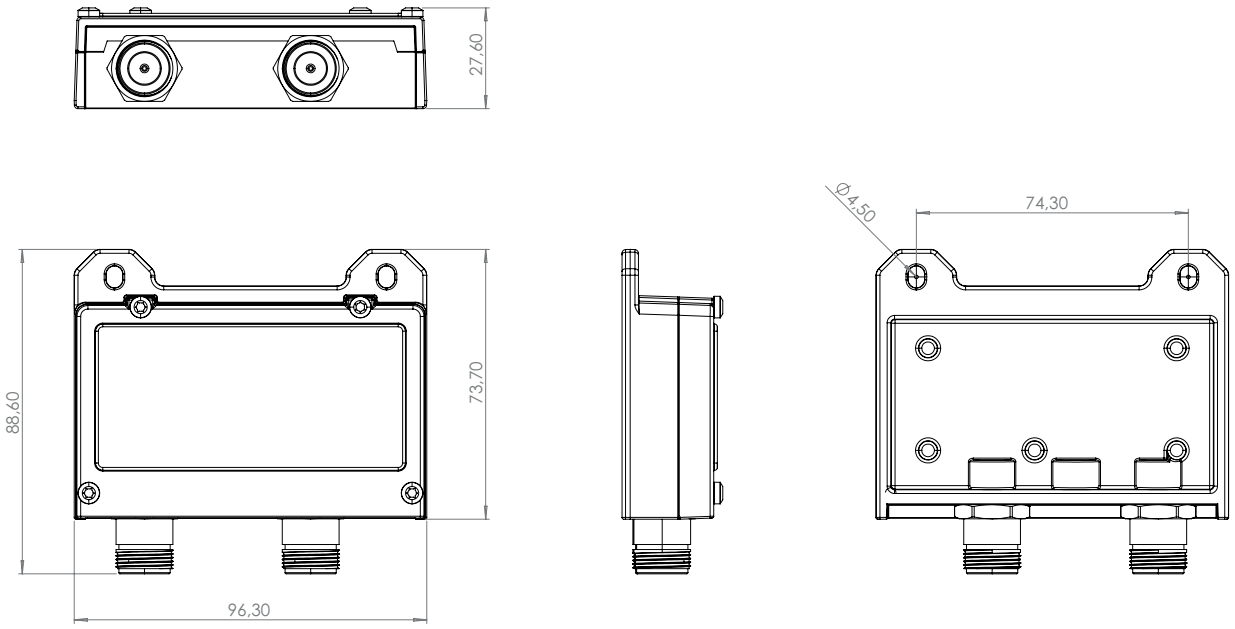
Technical Drawing



Designed and Manufactured IN SWEDEN

Professional Satcom Frequency Converters & Components. All products are fully CE and RoHS complient and every unit includes full documentation of performance tests and quality control. Please contact sales@smw.se to configure or customize the unit to your needs. Visit smw.se or scan QR code to see our full product range and request a quote.

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