

Model Number: 2551B-B7



4 Channel L-band AGC Amplifier

With Current and Power Monitoring



Front view of 4 channel AGC Amplifier

This 4-channel L-band AGC Amplifier benefits from an Automatic Gain Control (AGC) circuit to allow for changing levels on the input of each amplifier. It is housed in a 1U, 19" shelf and is designed to amplify up to four L-band (850-2150MHz) signals.

An RS232/RS485 port is provided at the rear for remote monitoring. The front panel is equipped with 4 tri-colour LEDs which show one of four different states and provide simplified monitoring of the operation of the AGC amplifier status.



Rear view of 4 channel AGC Amplifier

This unit has 75 ohm BNC connectors, but other impedances and connector types are available (model numbers will vary).



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Technical specifications and operating parameters

RF Parameters		
Capacity	4 channels	
Input Frequency	950-2150 MHz (L-band)	
Input Level Range	-10 to -50 dBm	
Output Frequency	950-2150 MHz (L-band)	
Output Power Level	-5 dBm \pm 2 dB at 1550 MHz (at centre frequency)	
Output Frequency Response	Mono carrier, full band: AGC only	+ 6.5 \pm 1.5 dB
	Multicarrier, full band: System	\pm 3 dB (output to stay within \pm 3 dB window for all operational input levels across the full band)
	Any 40MHz segment within L-band	\pm 0.5 dB
Inter-modulation Distortion, OIP ₃	+ 24 dBm, worst case + 23 dBm	
Noise Figure	+ 30 dB (max)	
Gain Stability	\pm 0.2 dB at constant temperature	
Input Return Loss	> 14 dB typical	
Output Return Loss	> 12 dB typical	
Spurious Products	< -60 dBc (in-band)	
Isolation	I/P – I/P	> 50 dB
	O/P – O/P	> 50 dB
	I/P – O/P	> 50 dB

System Control	
Display	Front Panel LED's for monitoring amplifier status
Alarm monitoring Circuitry	Closed Contact
Remote Control	Via Serial port RS232
High Input Alarm Front	Visible Alarm (for each channel)
High Input Alarm Rear	Closed Contact RS232 (for each channel)
High Input Alarm Trigger Level	\geq 0 dBm

Environmental	
Operating temperature	0 to 45°C
Location	Indoor use only
Storage temperature	-20°C to +75°C
Humidity	85% non-condensing

Physical	
Connectors	BNC
Impedance	75 Ω
Vent Holes	On rear or side panels where viable
Dimensions	1U high x 19" wide
Colour	White 00-E-55 semi-gloss

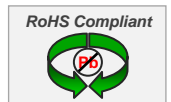
Power	
Voltage	Auto-sensing 100-240Vac
Frequency	50/60 Hz
PSU	Single
Hot-swap PSU	No

Key Features	
Dual redundant power supplies	
Switchable LNB Powering	
Internal 10MHz Source	



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