



L-band dual redundant high isolation line amplifier with variable gain

for ETL 26128 Modular System

RF Module 26128-AMP114: L-band dual redundant line amplifier with high isolation and variable gain. The RF modules are fully hot swappable.

Key Features

Function: Dual redundant Amplifier

Gain: Variable (range of 0-28dB)

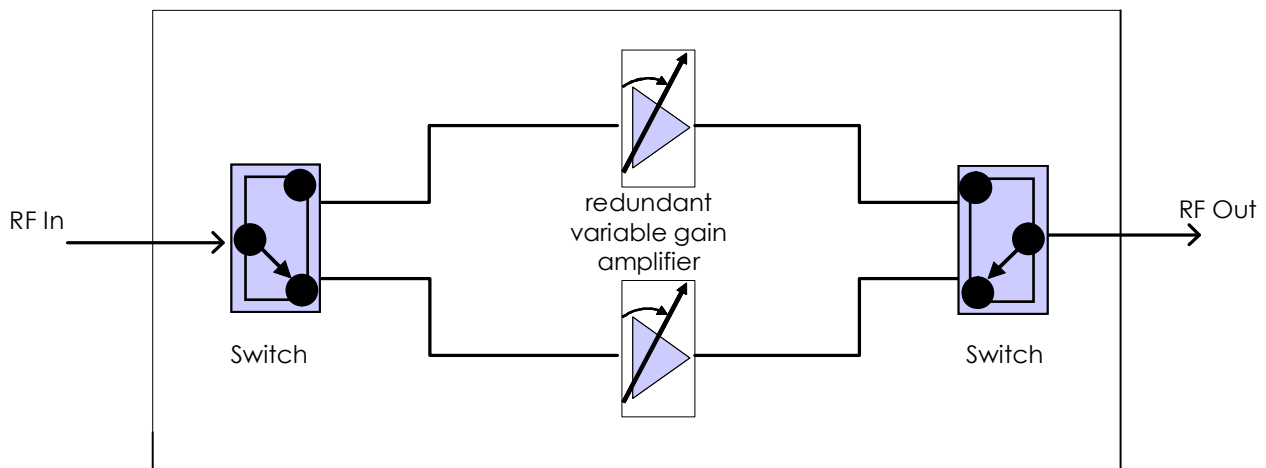
Slope Compensation: None

LNB Power: None

Slots: 1 (16 per chassis)

Other: high isolation (60dB), local & remote control & monitoring

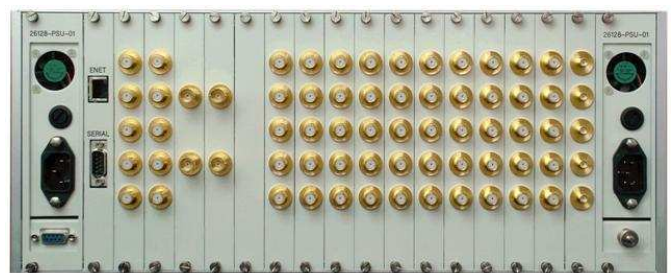
Application Notes: RF Distribution & uplinks, low-cost high resilience application



26128-AMP114 RF Module schematic block diagram



Front view showing hot-swap RF Module



Rear view of chassis

Overview: ETL's model 26128 Modular System offers total flexibility in managing L-band signals. The modular design comprises a chassis with 16 RF slots, two hot swap dual redundant PSUs, and one CPU. Each chassis can hold up to 16 RF modules, which can be hot swapped or hot expanded. This provides excellent resilience and scale ability.





Model Number: 26128-AMP114-xxxx

RF Engineering
and Custom Build

L-band dual redundant high isolation amplifier with
variable gain for Model 26128 Modular System

Technical specifications and operating parameters

RF Parameters					
Capacity	Redundant, Single Channel				
Module Slots Used	1				
Frequency Range	950-2150 MHz (L-band)				
Redundancy	1-to-1	Auto switch over from main to stand by is based on current sensing. Standby amp chain is cold standby redundant			
RF Connectors	50Ω SMA	50Ω BNC	75Ω BNC	75Ω F-type	
Flatness	850-2150MHz	±1.5 dB	±1.5 dB	±1.5 dB	±1.5 dB
	Any 36MHz	±0.5dB	±0.5dB	±0.5 dB	±0.5 dB
0 dB slope selected					
Input Return Loss	12 dB typical	12 dB typical	12 dB typical	12 dB typical	
Output Return Loss	12 dB typical	12 dB typical	12 dB typical	12 dB typical	
Max Gain Setting	28 dB typical		Settable in 1 dB Steps		
Gain	Maximum	28 ± 2 dB			
	Minimum	0 ± 2 dB			
Gain variation over frequency	± 2.0 dB		Over 950 to 2150 MHz		
	± 0.5 dB		Over any 36 MHz across full band		
Linearity	1dB GCP	> + 10 dBm		At maximum gain setting	
		> - 5 dBm		At minimum gain setting	
IP3	+ 22 dBm typical				
Noise Figure	12 dB		At maximum gain setting and 20°C		
	23 dB		At minimum gain setting and 20°C		
Crosstalk	60 dB		65 dB typical, 60 dB minimum. Cross talk between 2 cards set to same gain setting		
In band Spuri	< - 70 dBm				

Chassis Specifications	
Dimensions	4U high x 450mm deep x 19" wide
Weight	20 kg (fully populated)
Colour	White 00-E-55 semi-gloss (Front panel)
AC Power	85-264V AC (50/60Hz)
PSU	Dual redundant, hot-swap

Power	
LNB Power	None
Power Supply	Chassis is AC mains powered and provides 24V DC to each RF module (see chassis specifications)

System Control	
Local Control & Monitor	Push button & display, accessible via front door
Remote Control & Monitor	Via CPU as fitted, see chassis specifications

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

Key Features	
Variable Gain	
High Isolation	
Dual redundant amplifiers	

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