

Model Number: 26128-DIV407-xxxx RF Engineering

RF Engineering and Custom Build

4-way L-band splitter with variable gain, variable slope & LNB powering

for ETL 26128 Modular System

RF Module 26128-DIV407: L-band variable gain and variable slope compensation 4-way splitter with (13/18V and 22KHz tone option) LNB powering and LNB current monitoring. The RF modules are fully hot swappable.

Key Features

Function: 4-way Splitter

Gain: Variable (range of 0-28dB)

Slope Compensation: Variable **LNB Power:** 13/18V 22KHz Tone

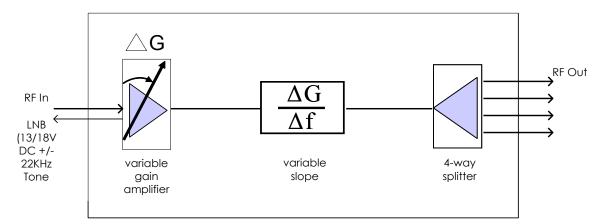
Slots: 1 (16 per chassis)

Other: LNB current monitoring; local & remote

contro

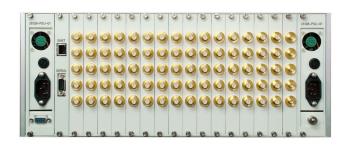
Application Notes: RF Distribution, low-cost high

redundancy application



26128-DIV407 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.

















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4-way L-band variable gain, variable slope splitter with LNB powering for Model 26128 Modular System

Technical specifications and operating parameters

	RF Parameters				
Capacity		4 way splitter	Up to 16x DIV407 cards can be fitted into 26128 chassis.		
Frequency Range		850-2150 MHz (L-band)			
Connector & impedances		50Ω SMA	50Ω BNC	75 Ω BNC	75Ω F-type
Gain	Maximum	28 ± 2 dB	28 ± 2 dB	28 ± 2 dB	28 ± 2 dB
	Minimum	0 ± 2 dB	0 ± 2 dB	0 ± 2 dB	0 ± 2 dB
Gain Flatness At OdB slope selection	850- 2150MHz	± 1.0 dB	± 1.0 dB	± 2.5 dB	± 2.5 dB
	Any 36MHz	± 0.5 dB	± 0.5 dB	± 1.0 dB	± 1.5 dB
Input	Typical	14 dB	12 dB	12 dB	12 dB
return	Minimum	11 dB	10 dB	9 dB	8 dB
Output	Typical	14 dB	12 dB	12 dB	12 dB
return	Minimum	11 dB	10 dB	9 dB	8 dB
Gain Step	S	1 ± 0.25 dB	Digitally controlled, 1dB step size		
Dynamic Range		28 dB			
Slope Settings		0, +2 dB, +4 dB, +6 dB			
Isolation	Single card	23 dB	Minimum between any two output ports		
	Card-to- card	45 dB	Minimum between adjacent cards in chassis.		
	0dB gain setting	30 dB		Typical	
Noise figure	14dB gain setting	18 dB			
	28dB gain setting	12 dB			
1dB GCP	0dB gain setting	0 dBm		1dB gain compression point, output power	
	14dB gain setting	5 dBm			
	28dB gain setting	10 dBm			

Power		
LNB Power	0/13/18V via common (RF in)) port with 22kHz select. 450mA per channel available but total LNB power per chassis is limited to approx 100W depending on other modules	
Power Supply	24 Vdc	
Input RF Power	16dBm	Absolute maximum

Environmental		
Operating temperature	0 to 45°C	
Location	Indoor use only	
Storage temperature	-20°C to +75°C	
Humidity	20 to 90% non-condensing	

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

System Control		
Local Control & Monitoring	Push button & display,	
Remote Control & Monitoring	Via CPU as fitted, per chassis specifications	

Key Features
LNB power and 22kHz Tone
Variable Gain (0-28 dB)
Variable Slope Compensation (0-6 dB)







