

RF AMPLIFIER LINE DRIVER SYSTEM



"HOT SWAPPABLE" RF TRAYS, 1:1 REDUNDANT MODEL

This RF Amplifier Line Driver System offers gain and gain adjustment at RF frequencies. This system is designed to compensate for long cable run loss and to provide system redundancy. The 1:1 Redundant System provides automatic and manual switchover modes of operation.

STANDARD FEATURES

- RS422, RS485 and 10/100 Base-T Ethernet
- Fault tolerant design
- Fully redundant, hot swappable RF trays with power supplies (1:1 redundant models)
- Remote status
- Module current fault detection
- Front panel module current alarm
- Auto/manual mode
- Off-line input/output access (1:1 redundant units)
- Output power detector (-5 to +30 dBm)

Frequency (GHz)	Dual Channel Model Number	1:1 Redundant Model Number
5.825-6.425	ALD-582642	ALR-582642
13.75-14.5	ALD-137145	ALR-137145

SPECIFICATIONS

Gain	33 ±3 dB at center frequency
Amplitude Response	±0.25 dB/40 MHz, ±1 dB/output frequency band
Gain Adjust	20 dB minimum
Power Output (1 dB Compression)	30 dBm minimum
Third Order Intercept Point	40 typical, 35 dBm minimum
Channel-to-channel Match	0.5 dB maximum
Noise Figure	10 dB maximum
Spurious (Signal Independent)	Below thermal noise
Isolation	50 dB minimum
Input Return Loss	18 dB/50 ohm minimum
Output Return Loss	18 dB/50 ohm minimum
Input Level (Non-damage)	+10 dBm maximum
Temperature Stability	± 0.25 dB over any 20°C
	±0.75 dB over 0°C to 50°C
Output Power Detector	-5 to +30 dBm

PRIMARY POWER REQUIREMENTS

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Voltage	90-250 VAC	
Frequency	47-63 Hz	
Consumption	25W typical	
Fuse	T1.25A	

SUMMARY ALARM

Contact closure/open for DC voltage and/or amplifier alarm. Status alarm readout on remote control bus

PHYSICAL

١	Weight	10 pounds (4.5 kg) nominal without rack slides 14 pounds (6.4 kg) nominal with rack slides
(Chassis Dimensions	. 19" x 1.75" panel height x 20" maximum
(Connectors -	
	RF	. SMA female
	Summary Alarm	. DE-9P
	Remote Interface	. DE-9S for RS422, RS485
		RJ-45 female for Ethernet
	Primary Power	. IEC-320

ENVIRONMENTAL

Operating -		
Ambient Temperature	0 to 50°C	
Relative Humidity	Up to 95% at 30°C	
Altitude	Up to 10,000 feet	
Non-operating -		
Ambient Temperature	50 to +70°C	
Relative Humidity	Up to 95% at 40°C	
Altitude		

Shock and Vibration Normal handling by commercial carriers

