



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 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 power supplies
- Remote status
- Module current fault detection
- Front panel module current alarm
- Auto/manual mode
- Off-line input/output access (redundant models)

Frequency (GHz)	Dual Channel Model Number	1:1 Redundant Model Number	1:2 Redundant Model Number
0.95-1.45	ALD-095145	ALR-095145	ALR2-095145
0.95-1.75	ALD-095175	ALR-095175	ALR2-095175
0.95-2.15	ALD-095215	ALR-095215	ALR2-095215
2.0-2.4	ALD-200240	ALR-200240	ALR2-200240
3.4-4.2	ALD-340420	ALR-340420	ALR2-340420
5.725-6.725	ALD-572672	ALR-572672	ALR2-572672
5.825-6.425	ALD-572672	ALR-572672	ALR2-572672
10.7-12.75	ALD-107128	ALR-107128	ALR2-107128
12.75-13.25	ALD-127132	ALR-127132	ALR2-127132
12.75-14.5	ALD-127145	ALR-127145	ALR2-127145
13.75-14.5	ALD-137145	ALR-137145	ALR2-137145
17.7-22	ALD-177220	ALR-177220	ALR2-177220

SPECIFICATIONS

Gain at 23C	33 ±3 at center frequency
Amplitude response.....	±0.25 dB/40 MHz, ±1 dB/≤1 GHz RF band, ±2 dB/>2 GHz RF band
Power output (1 dB compression)	+10 dBm minimum
Third order intercept point	+20 dBm minimum
Channel-to-channel gain match	2 dB maximum at center frequency
Noise figure (maximum gain)	3 dB maximum below 4.2 GHz
	4 dB maximum up to 12.75 GHz
	5 dB above 12.75 GHz
Spurious (signal independent).....	Below thermal noise
Isolation	50 dB minimum
Input and Output return loss.....	18 dB/50 ohms minimum
	10 dB/50 ohms below 2.15 GHz
Input level (non-damage)	+10 dBm minimum
Temperature stability	±0.25 dB over any 20°C
	±0.75 dB typical over 0° to 50°C

OPTIONS

- 1 RF input monitor with -20 dBc nominal level
- 2 RF output monitor with -20 dBc nominal level
- 3A Input level control: 30 dB in 0.2dB steps, local and remote control
- 3B Output level control: 30 dB in 0.2dB steps, local and remote control
- 4 Increased output power
 - A. +20 dBm output P1 dB compression point
 - B. +30 dBm output P1 dB compression point (below 14.5 GHz)
- 5 Higher gain
 - A. 43 ±3 dB gain
 - B. 53 ±3 dB gain
- 6 Output power detection

Note: Option 1 and 3A will degrade noise figure by the insertion loss of coupler.
Options 2 and 3B will degrade output compression point by the insertion loss of devices after amplifier.

PRIMARY POWER REQUIREMENTS

Voltage.....	90-250 VAC
Frequency.....	47-63 Hz
Consumption	25-40W typical
Fuse.....	T1.25A

SUMMARY ALARM

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

PHYSICAL

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	Up to 40,000 feet
Shock and Vibration	Normal handling by commercial carriers

