



QDAXF 870 Distribution Amplifier:

Features:

- ▶ 870 MHz, 1-way or 2-way models
- ▶ Available in power-doubled & quadra-power RF output hybrid technology
- ▶ Power-doubled versions provide 2.5 dBmV additional output level over conventional push-pull types
- ▶ Quadra-power models provide 4.5 dBmV additional output level over conventional push-pull types
- ▶ Plug-in hybrids & accessories allows the accommodation of wide ranges of RF input & RF output signal levels
- ▶ Interstage EQ & pads set levels
- ▶ Fixed EQ & pad sockets at interstage provide slope range far beyond normal slope & gain circuits
- ▶ Using QAIE fixed EQ at the intersatge location allows slopes that reach 10-12 dB or more
- ▶ Plug-in pads & EQs used at amplifier input provide more uniform carrier-to-noise performance at all frequencies
- ▶ 5-40 MHz return bandwidth
- ▶ Reverse sweep insertion port
- ▶ Optional return amplifier activated by inserting return hybrid IC
- ▶ Quadra-powered amplifiers require QDAXRA-23L or QDAXRA-16L low current hybrid for the return amplifier
- ▶ Maximum total loop gain of 55 dB recommended for 2-way amplifiers
- ▶ Housing provides efficient thermal capability & stringent RFI shielding
- ▶ Operates safely at ambient temperatures of +120°F (+48°C)
- ▶ Meets FCC CLI regulations
- ▶ Includes external Class II UL approved power transformer



QDAXF Specifications

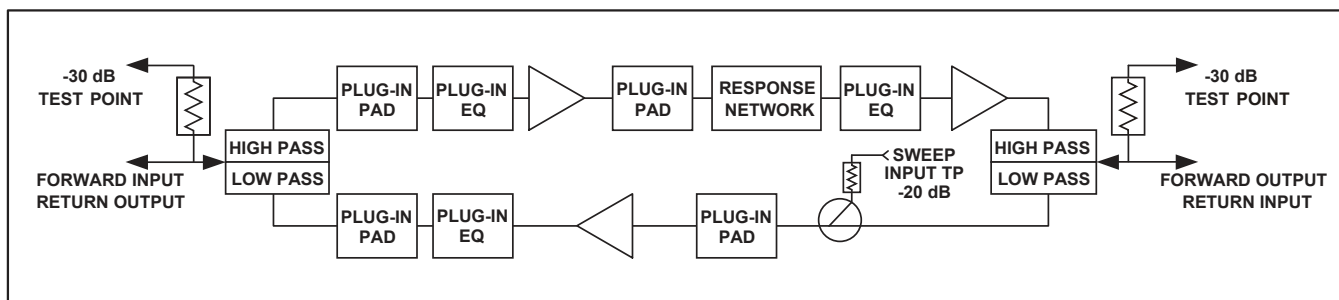
SPECIFICATIONS	870 2-WAY		RETURN AMPLIFIERS	
	Power-Doubled	Quadra-Power	Standard Push-Pull	Low Current Push-Pull
BANDWIDTH	54-870 MHz	54-870 MHz	5-40 MHz	5-40 MHz
FREQUENCY RESPONSE	+/- 0.5 dB	+/- 0.5 dB	+/- 1.5 dB	+/- 1.5 dB
GAINS AVAILABLE (dB)	(30, 32), 36, 39	15, (30), 34, 37	16, 20	16, 23
CHANNEL LOADING	128	128	6	6
RETURN LOSS (Worst Case)	14 dB	14 dB	16 dB	16 dB
GAIN CONTROL RANGE	Pad	Pad	6	6
SLOPE CONTROL RANGE	EQ	EQ	n/a	n/a
OUTPUT LEVELS (dBmV)	44/34	44/34	48	48
DISTORTIONS	CROSS MODULATION (-dB)	(68), 69	74, (72), 72	79
	COMP. TR. BT. (-dB)	(63), 63	68, (66), 66	n/a
	COMP. 2nd ORD. (-dB)	(67), 67	70, (69), 69	72
NOISE FIGURE (dB)	(8.6), 7	11, (8.6), 7	8	6
DC AMPERES @ 24 VDC	0.66	1.1	0.22	0.13
POWER DISSIPATION (Watts) ⁽¹⁾	27	44	8	5
OPERATING TEMPERATURE	0°C to +50°C (+32°F to +122°F)			
HUMIDITY	20%-55% (without condensation)			
DIMENSIONS	9.13H" x 7.0"W x 3.56"D (23.19H x 17.78W x 9.04D cm)			
WEIGHT	7.5 lbs (3.4 kg)			
NOTES:				
(1) Power dissipation measured at 120V input to UL approved power transformer. DC amperes is internal voltage regulator load.				
(2) QDAXRA-23 specification is for discrete second order beats - not composite second order.				

QDAXF 870 Distribution Amplifier:

Ordering Information

Example Part Number: QDAXF870 - 32 P 2W	
1	2 3 4
1: Frequency: 870 = 870 MHz	
2: Gain (See Specifications Table)	
3: Output Technology: P = Power-Doubled Q = Quadra-Power	
4: Amplifier Configuration: 2W = 2-way Blank = 1-way	
Part Number	Description
Options & Spares	
QDAXRA-16	16 dB Return Amplifier
QDAXRA-16L	16 dB Return Amplifier
QDAXRA-20	20 dB Return Amplifier
QDAXRA-23L	23 dB Return Amplifier
QAE 870-dB	Forward EQ Values from 0-24 dB in 1.5 dB steps
QAIE-870-dB	Interstage EQ Value, Factory Selected for Slope
QER 40-dB	Reverse EQ Value in MHz and dB ratings
SXP-TY-**	Plug-in Attenuator Pads, ** = 0-20 dB in 1 dB steps
#951	120 Volts to 26 Volts, 60 Hz AC Power Transformer, 50 VA Rating
<p>#951 Transformer</p>	
<p>NOTES:</p> <p>All 2-way amplifiers with a forward gain of 35 dB or more require the use of QDAXRA-16 return amplifiers only. Quadra-powered amplifiers must use QDAXRA-**L return amplifiers only.</p>	

Functional Schematic



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Specifications subject to change without notice.

