



## QDEU 870 & 1000 MDU Distribution Amplifier:

### Features:

- ▶ 870 & 1000 MHz, 2-way models
- ▶ Cost-effective, high performance, fully functional MDU amplifier with high slope capability
- ▶ Active 2-way eliminating a need for a return amplifier
- ▶ Forward amplifier uses cascaded GaAs hybrids in several gain choices
- ▶ GaAs technology versions have higher output level capability & lower noise figure than previous technologies
- ▶ Fixed EQ socket & plug-in pad socket in the front end can accommodate wide range of input signal levels
- ▶ Plug-in hybrids & accessories
- ▶ Shipped with variable plug-in attenuator in plug-in pad style minimizing need to purchase additional input pads
- ▶ Interstage gain control allows up to 10 dB output level adjustment while interstage slope control allows for adjustment of 15 dB of output slope
- ▶ Factory-selected plug-in interstage EQ can be used to extend output slope capability
- ▶ Variable gain & tilt (forward & reverse)
- ▶ Includes external class II UL approved power transformer
- ▶ 5-42 MHz, 2-way return path has input test point & plug-in input pad before the amplifier, with 22 db gain
- ▶ Return circuit has variable slope control & variable gain control after the amplifier
- ▶ 20 dB return path output test point can be used to set output levels
- ▶ Forward amplifier output test point can be used to insert return path carriers while monitoring carriers signal level at the return path input test point &/or the return path output test point when setting levels
- ▶ Small physical size increases convenience of many installations where space constraint is an issue
- ▶ Maximum total loop gain of 65 dB recommended for 2-way amplifiers



### QDEU Specifications

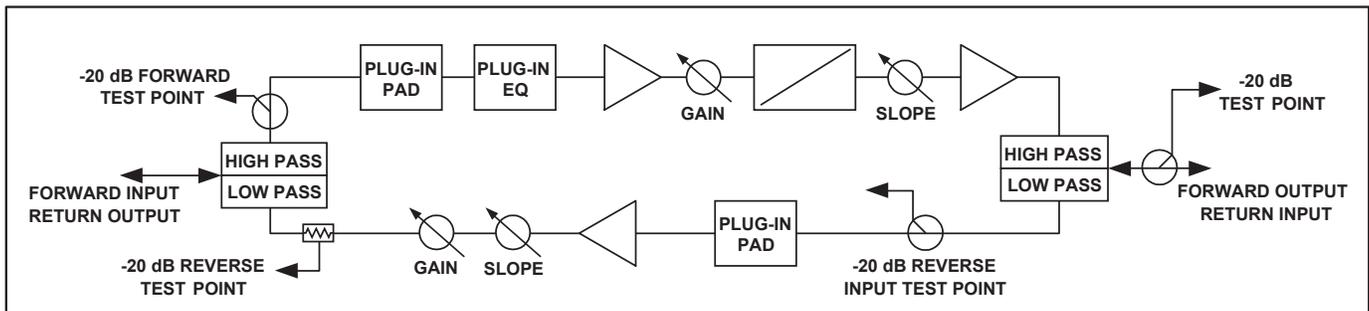
SPECIFICATIONS	870 & 1000 MHz 2-WAY			RETURN AMPLIFIER
	QDEU 27G	QDEU 31G	QDEU 36G	Low Current
BANDWIDTH (MHz)	54-870	54-870	54-870	5-42
FREQUENCY RESPONSE	+/- 0.5 dB	+/- 0.5 dB	+/- 0.5 dB	+/- 1.5 dB
GAINS AVAILABLE	27 dB	31 dB	36 dB	22 dB
CHANNEL LOADING	128	128	128	4
RETURN LOSS (Worst Case)	14 dB	14 dB	14 dB	16 dB
GAIN CONTROL RANGE	10	10	10	10
SLOPE CONTROL RANGE	15	15	15	5
OUTPUT LEVELS (dBmV)	44/34	44/34	44/34	48
DISTORTIONS	CROSS MOD. (-dB)	n/a	n/a	n/a
	COMP. TR. BT. (-dB)	68.3	68.2	68.3
	COMP. 2nd ORD. (-dB)	69.2	69.9	69.3
NOISE FIGURE	5.8 dB	5 dB	6.5 dB	5 dB
DC AMPERES @ 24 VDC	0.5	0.5	0.5	0.06
POWER DISSIPATION (Watts) <sup>(1)</sup>	20	20	20	2.5
OPERATING TEMPERATURE	0°C to +50°C (+32°F to +122°F)			
HUMIDITY	20%-55% (without condensation)			
DIMENSIONS	8.25"H x 5.0"W x 2.26"D (20.96H x 12.7W x 5.74D cm)			
WEIGHT	3.5 lbs (1.59 kg)			
NOTES:				
(1) Power dissipation measured at 120-volt input to UL approved power transformer. DC amperes is internal voltage regulator load.				
(2) Return Amplifier specification is for discrete second order beats - not composite second order.				

## QDEU 870 & 1000 MDU Distribution Amplifier:

### Ordering Information

<b>Example Part Number: QDEU870 - 31 G 2W</b>	
1	2
1: Bandwidth: 1000 = 1000 MHz 870 = 870 MHz	
2: Gain (See Specifications Table)	
3: Technology: G = Cascaded GaAs PP	
Part Number	Description
Options & Spares	
MNxEQ	1000 MHz EQs, 0-16 dB in 1 dB steps. This EQ is used in the input. 4 EQs shipped with unit.
IPB-**	Plug-in attenuator pads, ** = 0-20 dB in 1 dB steps. Variable pad included with unit.
#951	120 Volts to 26 Volts, 60 Hz AC Power Transformer, 50 VA Rating (included with QDEU)
#951 Transformer	

### Functional Schematic



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Specifications subject to change without notice.

