

# Q-SERIES® Amplifiers

## Headend Amplifiers



### QRBA8 Return Amplifier:

#### Features:

- ▶ Eight independent, well shielded amplifiers in 2RU
- ▶ 5-200 MHz bandwidth
- ▶ Push-pull hybrid technology
- ▶ Plug-in hybrids & accessories
- ▶ Provides gain for passive isolation in a headend
- ▶ Uses 120 VAC, 60 Hz, 50 VA external Class II UL approved transformer (included)
- ▶ User supplied +24 Volts regulated DC powering can also be used on all QRBA modules (redundancy)
- ▶ Can also be used as IF amplifier for digital/analog headend IF signal distribution and processing for emergency alert systems or prior to long haul digital IF fiber distribution networks

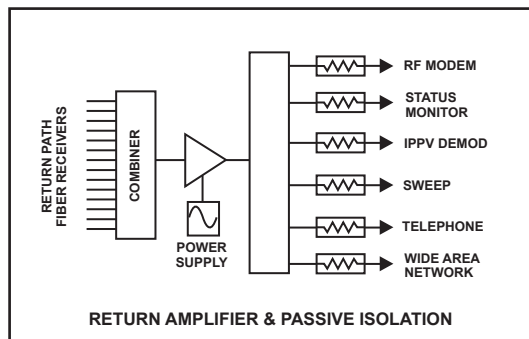


### QRBA8 Specifications

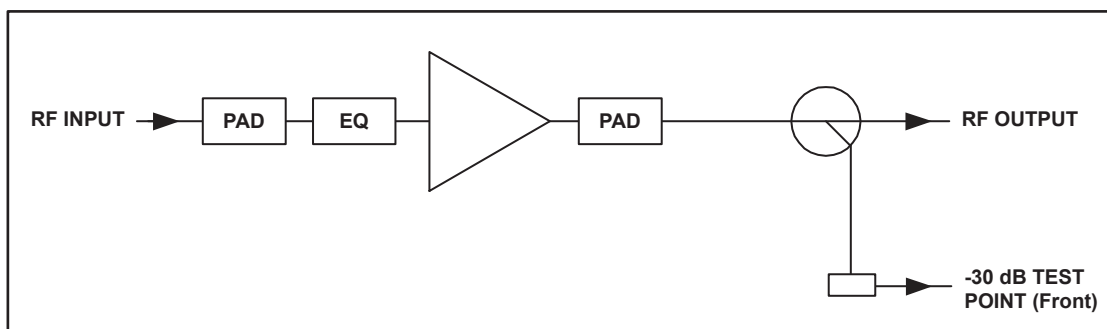
SPECIFICATIONS		QRBA200-25/8		
GAIN		25 dB	25 dB	25 dB
RESPONSE		+/- 0.5 dB	+/- 0.5 dB	+/- 0.5 dB
CHANNEL LOADING		6	9	22
GAIN CONTROL RANGE (dB)		Pad	Pad	Pad
SLOPE CONTROL RANGE (dB)		EQ	EQ	EQ
RETURN LOSS		16 dB	16 dB	16 dB
NOISE FIGURE		5 dB	5 dB	7 dB
OUTPUT LEVEL <sup>(1)</sup>		+45 dBmV	+45 dBmV	+45 dBmV
DISTORTIONS	CROSS MODULATION (-dB)	80	74	58
	COMP. TR. BT. (-dB)	89	80	61
	COMP. 2nd ORD. (-dB)	79	77	74
POWER DISSIPATION @ 120 VAC (Watts)		41	41	41
OPERATING TEMPERATURE		0°C to +50°C (+32°F to +122°F)		
HUMIDITY		20%-55% (without condensation)		
DIMENSIONS		3.5"H x 19.0"W x 3.25"D (8.89H x 48.26W x 8.26D cm)		
WEIGHT		8.0 lbs (3.6 kg)		
<b>NOTE:</b> (1) Flat gain RF output levels are specified on all models.				

## QRBA8 Return Amplifier:

### Functional Schematics



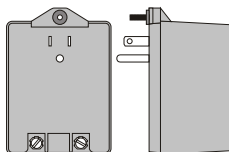
The return path combining of fiber optic nodes is limited by “summing” of system noise when the various return paths are combined for processing in a headend or hub. When eight or more nodes are combined, the passive loss of the splitter or coupler array attenuates the returning digital and analog RF signals to a point requiring amplification before distribution within the headend. If any of the headend reverse path signal processors radiate spurious signals back into the splitter network, additional passive loss (inline pad) is needed to attenuate the spurious signals and produce a higher level of isolation between these devices. QRBA8 offers EIGHT low distortion, high-gain return amplifiers in a single rack unit, providing the gain for the network shown.



### Ordering Information

Part Number	Description
QRBA200-25/8	8-Pack Return Amplifier
<b>Options &amp; Spares</b>	
QER40-**	Response-corrected 40 MHz EQ, ** = 0-20 dB in 1 dB steps.
QEE40-**	Cable-matched 40 MHz EQ, ** = 0-20 dB in 1 dB steps.
QEE200-**	Cable-matched 200 MHz EQ, ** = 0-20 dB in 1 dB steps.
JXP-A-**	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

#951 Transformer



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Specifications subject to change without notice.

