



Quality RF Services, Inc.

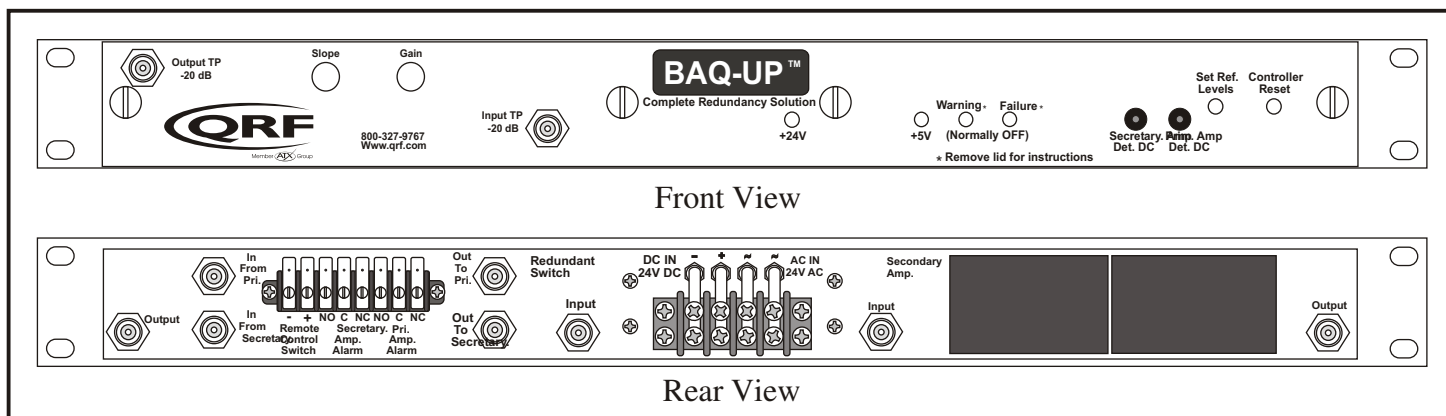
Available from Mega Hertz

800-883-8839

**COMPLETE
REDUNDANCY
SOLUTION**

BAQ-UP™

REDUNDANCY FOR HEADEND AMPLIFIERS-INCLUDES SWITCH



** Features **

- **Monitors both Amplifiers**
- **Failure Light and Alarm**
- **Reference Level Warning**
- **1 RU Rack Mount Design**
- **U.L. Approved Transformer**
- **Hot Swappable-Modular Amplifier**

The **BAQ-UP™** is a complete backup solution for critical headend amplifier circuits. The 1-RU chassis contains a redundancy switch, a redundant amplifier, and a power supply. The switch simultaneously monitors two RF amplifier outputs and performs a switch to the back-up amplifier when the main amplifier level drops by 3 dB or more. This threshold level of 3 dB is programmed at the factory. Other RF threshold levels may be requested when ordering.

Additionally, the switch can be forced into the redundant mode with the signal path through the backup amplifier. This is useful for troubleshooting or replacing the main amplifier. The switch performs all level sampling and relay switching with less than 2 dB of loss to the main amplifier path, 1 dB for the input RF path and 1 dB for the output RF path of the switch.

The redundant amplifier for the **BAQ-UP™** is available with specifications that meet or exceed current technology usage for gain or RF output. The redundant amplifier is plug-in modular, and is hot-swappable from the front of the rack. The RF input and output test points are located up front for easy access.

A dual-switch passive model is also available to work with the existing amplifiers in the headend or hub-site environment. Our 1 GHz passive switch provides redundant monitoring and control of amplifiers in the +20 to +50 dBmV output range.

The power supply for the **BAQ-UP™** provides power for the redundant amplifier and for the logic circuits and switches in the switch module. It can be powered by both AC and DC power sources simultaneously for maximum reliability. The main amplifier path through the switch is not affected by power interruptions, since this path is the normally closed path.

The **BAQ-UP™** includes a 50 VA external Class II power transformer. User supplied DC powering is a standard option on this model. This accomplishes two objectives:

- A. Heat reduction within the chassis.
- B. Use of a U.L. approved power transformer.

QRF continues to provide flexible and state-of-the-art technology at the lowest possible price.



Quality RF Services, Inc.

Available from Mega Hertz
800-883-8839

**COMPLETE
REDUNDANCY
SOLUTION**

BAQ-UP™	750 MHz			870 MHz		
Bandwidth	40 to 750 MHz			40 to 870 MHz		
Response (dB)	+/- .5			+/- .5		
Channel Loading	110			128		
Gain Ctrl. Range (dB)	8			8		
Slope Ctrl. Range (dB)	6			6		
Technology	Si PD	GaAs PD	CGP	Si PD	GaAs PD	CGP
Gains Available (dB)	30, 34	30, 34	33	30, 34	30, 34	33
Output Level (dBmV)	38	43	43	38	43	43
Return Loss (dB)	17	17	17	17	17	17
Noise Figure (dB)	6.0, 5.5	4.7, 4.2	4.2	6.0	5.0, 4.5	4.5
Distortions: CTB (-dB)	72	73	74	68	66	68
CSO (-dB)	72	69	70	70	67	68
Power (Watts)(24dc, 120vac)	16.2, 25	17, 26	21, 32.5	16.2, 25	17, 26	21, 32.5

SWITCH SPECIFICATIONS:	
Switching Time	30 ms maximum
Isolation	50 dB
Insertion Loss (main path)	2 dB max (1 dB on the input and 1 dB on the output)
Return Loss	18 dB min
R.F. Sensitivity Range	+20 dBmV to +50 dBmV amplifier output monitoring
Pwr Dissipation	6.3 watts normal mode, 8.5 watts in back-up mode

FLAT output levels with full analog channel loading are specified on all models. Adjustments may be made due to channel loading or levels. Contact QRF Applications Engineering.

ORDERING INFORMATION:

Amplifier and Switch Models:

QRED870-30GP	QRED750-30GP
QRED870-30P	QRED750-30P
QRED870-34GP	QRED750-34GP
QRED870-34P	QRED750-34P
QRED870-33CGP	QRED750-33CGP

Dual Switch Model (no amplifier):

QRED1000-SW/SW

Gain value in dB precedes output technology code.

P= Silicon Power-Doubled

GP= Gallium Arsenide (GaAs) Power-Doubled

CGP= Cascaded GaAs Power-Doubled

OPTIONS:

IPB-* Plug-in attenuator pad, values from 0 to 20 dB, 1 dB steps.**

#951 120 VAC to 26 VAC, 50 VA power transformer is included with the unit. Information is provided for spares ordering only.

Dimensions: 19.0" x 1.75" x 5.00"

Shipping Weight: 8 lbs.