



G-Wave Carrier Repeaters extend the coverage area of radio communications in buildings and RF shielded environments. Units feature extremely low noise figure and a wide dynamic range. This type of system is the most economical solution for several story buildings with weak signal strength outside the covered structure. Local Visual Alarms are included.



Model: BDA-XXX-20/20-70-A

1. Electrical Characteristics

Item	Uplink	Downlink	Note
Frequency Range	See Table	See Table	Sample Bands shown refer to table below
Gain	70 dB (Min.)	70 dB (Min.)	
Gain Flatness	±1.5 dB	±1.5 dB	Over Freq. Range
Gain Attenuation Range	0 to 30 dB	0 to 30 dB	in 2 dB steps
Composite Output Power (ALC Set)	+20 dBm	+20 dBm	
3rd Order Intercept Point	+39 dBm	+39 dBm	
Noise Figure	4.0 dB (Typ.)	4.5 dB (Typ.)	@ Maximum Gain
Input / Output VSWR	1.5:1 (Max.)	1.5:1 (Max.)	
Propagation Delay	≤ 0.3 μsec	≤ 0.3 μsec	
ALC Range			>25 dB
Max RF Input			+10 dBm
Power Supply Local	110V/0.6 A to 220V/0.3 A (Autoranging, 50 to 60 Hz)		
Input/output Impedance	50 Ω		

2. Mechanical Characteristics

Monitoring Connector	9 Pin Male	Optional
RF IN/OUT Connector	N-Type Female	
Weight	52.0 lb / 23.6 kg (approximate)	
Dimensions	18.0" x 13.3" x 6.4" 457 x 338 x 163 mm	

3. Environment Characteristics

Operating Temperature	-20°C ~ +50°C	Ambient
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7. Models

Part #	Description	Frequency Range
BDA-CELLA-20/20-70-A	Repeater	UL = 869-880 MHz, DL = 824-835 MHz
BDA-CELLB-20/20-70-A	Repeater	UL = 835-849MHz, DL = 880-894 MHz
BDA-CELLAB-20/20-70-A	Repeater	UL = 869-894 MHz, DL = 824-849 MHz
BDA-PCSF-20/20-70-A	Repeater *Also available in individual blocks	UL = 821-824 MHz, DL = 866-869 MHz

4. 9-PIN Male Pin Description (Optional)

1	N.O	250 mA
2	COM	Dry Contact Common Port
3	N.C.	Alarm Condition
4	N/A	
5	GND	
6	N/A	
7	N/A	
8	N/A	
9	+12V	(250mA)

5. Local LED Indication

Front Panel	UL & L ALC Indication	Red LED "ON" ALC Limited
Front Panel	UL & DL Alarm Indication	Red LED "ON" Alarm State
Front Panel	Power ON	Green LED "ON"

6. Outline Drawing

