

Tel: US 1.877.825.2007 / CAN 1.800.603.1454 Email: sales@comprodcom.com

BI-DIRECTIONAL AMPLIFIER (BDA)

BDA-40-SERIES

Designed and engineered to meet the fire protection codes (NFPA and IFC standards), Comprod Inc.'s Bi-Directional Amplifier (BDA) features advanced Alarm, Monitoring & Control capabilities ensuring continuous availability of mission-critical services. Certified: FCC and IC.

- Available in 700, 800 and 900 MHz Public Safety bands
- Ideal for indoor applications in commercial and government buildings, parking garages, mining facilities, subway stations and tunnels
- Rack mounted or in NEMA 4/4x waterproof, stainless steel enclosures
- Low noise figure, wide dynamic range
- Visual alarms and remote failure monitoring with Graphical User Interface

Electrical Specifications	BDA 764806	BDA 806870	BDA 896941
Frequency Range, MHz	DL: 764-776 UL: 794-806	DL: 851-869 UL: 806-824	DL: 935-941 UL: 896-901
Passband Ripple, dB	+/- 1.5	+/- 1.5	+/- 1.5
Automatic Gain Control (AGC), dB	30	30	30
Maximum Gain, dB	+80	+80	+80
Manual Gain Control (MGC), dB	0-31 in 1 dB Steps	0-31 in 1 dB Steps	0-31 in 1 dB Steps
Noise Figure, dB	2.5 Typical	2.5 Typical	2.5 Typical
Delay, Max., µs	1	1	1
Max. Output Power, dBm	DL: +31.5 UL: +31.5	DL: +31.5 UL: +31.5	DL: +31.5 UL: +31.5
VSWR	1.5:1	1.5:1	1.5:1
Input Voltage, Volts	AC: 115-220 DC: 24-27	AC: 115-220 DC: 24-27	AC: 115-220 DC: 24-27
Temperature Range, °C	-30 to +60	-30 to +60	-30 to +60
Humidity, %	95	95	95
Connectors	N Female	N Female	N Female
LNA bypass Function Implementation, dBm	-20 @ Input Power	-20 @ Input Power	-20 @ Input Power
Alarms	AGC, S/D, Power	AGC, S/D, Power	AGC, S/D, Power

Mechanical Specifications	BDA 764806	BDA 806870	BDA 896941
Enclosure	NEMA 4 Painted Steel	NEMA 4 Painted Steel	NEMA 4 Painted Steel
Dimensions, in. H, W, D	17.5 x 11 x 9	17.5 x 11 x 9	17.5 x 11 x 9
Weight, Ibs	33.5	33.5	33.5

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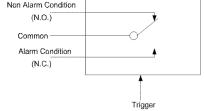


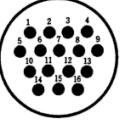


IN-BUILDING SYSTEMS

BI-DIRECTIONAL AMPLIFIER (BDA)

	Four Dry Co	ontac	t Alarms:		
Donor Antenna Alarm	AC Current Alarm		DC Current Alarm		RF System Alarm
- Antenna disconnected - Antenna open circuit	- AC Power failure (Can run on DC source)		- DC Power failure	- S	hutdown of RF System: - Overheating - Power over limit - VGA malfunction - Other failures
Relay Shown in Non-Alarm Condition. A kit of the connector with labeled		Pin	Description	Pin	Description
wires is supplied with the unit.	\frown	1	NC DC Relay	9	NO RF System Failure Relay
		2	COM DC Relay	10	NC AC Relay
Non Alarm Condition		2		11	COM AC Pelay





Pin	Description	Pin	Description
1	NC DC Relay	9	NO RF System Failure Relay
2	COM DC Relay	10	NC AC Relay
3	NO DC Relay	11	COM AC Relay
4		12	NO AC Relay
5		13	
6		14	NC Antenna Relay
7	NC RF System Failure Relay	15	COM Antenna Relay
8	COM RF System Failure Relay	16	NO Antenna Relay

Monitor		Alarm		Control
- TX/RX System	Gain	- TX Input Over Power		- HPA On/Off
- TX/RX Attenua		- TX/RX Output Over Power		- Gain
- TX Input Pow		- AGC Range Alarm		- AGC On/Off
- TX/RX Output P		- TX/RX S	•	- Shutdown On/Off
		•		-
- DC Voltage/Cur		- PSU Alarm		- MCU Reset
System Temper	ature	- Over Temperature		- Alarm Limit
👼 RF BDA GUI			_ 0	×
	Monitoring			
Creating RF Solutions	Classification	DL UL	Alarm	
	Input Power (dBm) Output Power (dBm)	-43.5 28.4 23.8	 DL Over Input DL Over Power 	
♦ Release	Gain (dB)	63.5 80.0	 DL AGC Range DL Shutdown 	
MENU	AGC(User) Atten (dB)	16.5 🚺 0.0 🚺	UL Over Power	
Status & Control Environment	AGC Level (dBm)	30 28 2 2	 UL AGC Range UL Shutdown 	
Download	AGC Window (dB) Balance Enable / Offset (dB)	2 2 2 2 0FF 4 2		
	ASD Level (dBm)	33 🚺 33 🚺	 PSU Fail Over Temp 	Visual Alarms and Remote
Alarm History Maintenance	ASD Time (min) / Count	0 🚺 3	O Door	Failure Monitoring with
	AGC Enable	ON ON		Graphical User Interface
Repeater Reset	ASD Enable		System	
EXIT	HPA OFF Case HPA Enable		DC Voltage (V) 28.00	
	nra cilable		Current (A) 1.07	
	Over TEMP' Enable	0FF 60		
	Over TEMP' Level('C)			
Inside Temp	Maker COMPROD	Model BDA RF 1Watt HW Ver	1.0 SW Yer 1.0	
Inside Temp	Maker COMPROD	Model BDA RF 1 Watt HW Ver	- 1.0 5W Ver 1.0	



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764-941 MHz