

# WDCS Active System Components

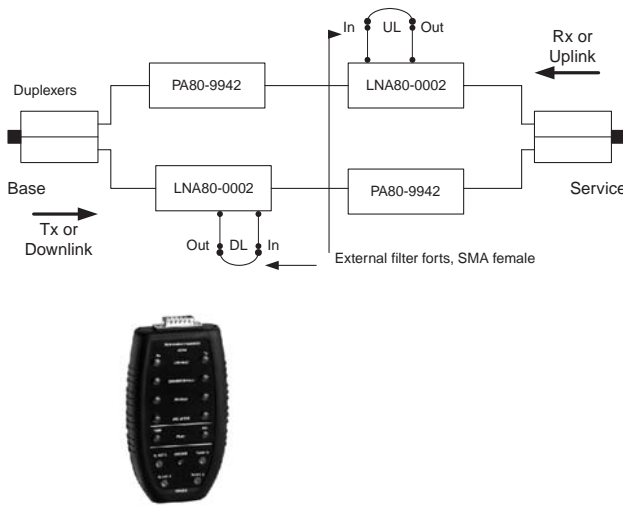
## I-BDA 48000 series for SMR 800/900

The 48000 series of off-air bi-directional amplifiers (BDAs) are certified by the FCC and IC Canada for use by service providers. Off-air BDAs receive and amplify the donor base transmit signals into the coverage area while receiving and amplifying the subscriber signals back to the base. Thus, these BDAs maximize capacity in the coverage area at the lowest cost while allowing the service provider to centralize base radios for better spectrum use and control with lower maintenance costs.

- External filter ports to customize the pass band in the field
- High dynamic range to support hundreds of analog and / or digital subscribers
- Output limiting circuitry - maintains low IMD and prevents oscillation
- Low on-going cost of use - fast set up, high MTBF and no maintenance
- Modular components replaced in minutes with a screwdriver for easy field repair



48000 Series BDA



External filter ports allow for the connection of externally mounted filtering. The external filter modifies the pass band and can be field changed as needed.

High visibility power and fault LEDs are located on the faceplate of the BDA. Additionally, the PM800 performance monitor connects to the 15-pin test port for detailed diagnostics. The PM800 can be permanently mounted near the BDA via a 10-foot extension cable (included) or up to 100 feet away with optional extension cables. For remote surveillance, the RPM800 will dial out on alarms and provide remote shutdown over a POTs line.

### SYSTEM INTEGRATION

Applications	In-building
Number of Carriers	Multi carrier
Amplifying System	Off-air, bi-directional
Max. Cascading	6 BDAs

### PERFORMANCE

Output Power, dBm	30
3rd Intercept Point, DL/UL, dBm	> 45 / > 45
Gain, DL/UL, dB	60 - 80 variable, manually
Return Loss, dB	> 14
Noise figure, dB	< 3 at max. gain DL / UL

### POWER/MECHANICAL SPEC./ENVIRONMENT

Power Consumption, VA	115
Cooling	Convection
MTBF	> 100,000 h total
RF Ports	2 connectors, N-female, 50 ohms
Housing	Metal casing, coated, wall mount
Color	Semi gloss, grey
Dimensions, W x H x D, mm (in)	470x343x185 (18.5x13.5x7.3)
Weight, kg (lb)	< 12.6 (28)
Operation Temperature, °C (°F)	-30 to +50 (-22 to + 122)
Humidity, %	90, non condensing

### MONITORING

Remote Monitoring	RPM800
Alarm Interface	TTL

### ORDERING INFORMATION

Model Number	Frequency Band	Frequency Range UL, MHz	Frequency Range DL, MHz
I-BDA-48710	SMR 800	806 - 824	851 - 869
I-BDA-48722	SMR 900	896 - 902	935 - 941