



# The **RF** Experts

SB I Series family of signal boosters provides an exceptional balance of performance and value for extended coverage of radio communications networks. Covers full Public Safety band in accordance with latest FCC configuration code. Models for indoor and outdoor applications.

# PROBLEMS/SOLUTIONS

RF coverage is required for different building sizes and configurations.

• SB I has multiple output power models: High power models (+33 & 30 dBm) and Low power model (+25.5 dBm).

System monitoring is required.

• Alarm and sampler port are available.

Need to eliminate potential interference and unwanted coverage.

• Gain is adjustable from 50 to 74 dB in 2 dB increments.

Reliable in-building communications is a must.

• Bird invented the signal booster and has been a leader in providing reliable in-building wireless solutions since 1979.

**Extreme Weather Conditions** 

• Weatherproof NEMA 4 style enclosure available for cellular models.

# **APPLICATIONS**

Cost effective in-building coverage solutions for applications in critical communications systems.

Public Safety, Private Wireless networks.

Excellent selectivity for operation in a shared frequency band.

Coverage for Cellular A, B, & A/B Bands.

Coverage for NPSPAC channels

(National Public Safety Planning Advisory Committee).

Coverage for LMR 700 or 800 MHz Bands.

Coverage for Dual Band 700/800 MHz Bands.

Models available for outdoor harsh environments. Ideal for use at oil drilling rigs, gravel pits and quarries, construction and open pit mining sites.

# Signal Booster **SBI Series**

#### **ELECTRICAL SPECIFICATIONS**

Gain (Minimum attenuation) [dB]	74
Gain Flatness [dB]	+/- 1.5 (max)
Noise Figure [dB]	5 (Max.)
Manual Attenuation Range [dB] Gain adjustment	0 to 30 in 2-dB steps
Output Composite Power [dBm] Low Power High Power A High Power B	+25.5 (Min.) - Uplink, +25.5 (Min.) - Downlink +25.5 (Min.) - Uplink, +32 (Min.)- Downlink +25.5 (Min.) - Uplink, +30 (Min.)- Downlink
3rd Order Output Intercept Point [dBm] @ 2 tones + 22 dBm ea. Low Power High Power	+41 (Min.) - Uplink, +41 (Min.) - Downlink +41 (Min.) - Uplink, +50 (Min.) - Downlink
Input/Output Impedance	50 ohm
VSWR IN/OUT	1.5:1 (Max.)
Propagation Delay [uSec]	<1.0
AC Power Input	85-150 VAC. (47-63 Hz) Above 150 V available, consult factory

#### MECHANICAL SPECIFICATIONS

Unit Power Consumption (AC/DC) 45 watts

Paint	Corrosion Protection, Powder Coat (Taupe)
Dimensions	15.3" x 15.4" x 7.9" (may vary by model)
Operating Temperature Range	-30°C to +50°C
Weight	33 lbs (may vary by model)
FCC Certification	EZZ5PI62
IC Certification	1940API62

# LMR 700 MHZ\*

Model Numbers	Description
62-83B-A12-01-T3	794-806/764-776 MHz, 74dB, Low Power, 12 MHz
62-83B-A12-03-T3	794-806/764-776 MHz, 74dB, High Power B, 12 MHz

# LMR 800 MHZ\*

Model Numbers	Description	
62-89C-A10-01-T3	806-816/851-861 MHz 74dB, Low Power, 10 MHz	
62-89C-A10-03-T3	806-816/851-861 MHz 74dB. High Power A. 10 MHz	

#### LMR 800 MHZ\*

Model Numbers	Description
62-89A-A18-01-T3***	806-824/851-869 MHz 74dB, Low Power, 18 MHz
62-89A-A18-03-T3***	806-824/851-869 MHz 74dB, High Power A, 18 MHz

#### LMR DUAL BAND 700/800 MHZ

<b>Model Numbers</b>	Description
62-83M-ADB-02-T3	794-806/764-776 MHz, 806-816/851-861 MHz, 74dB, Low Power
62-83M-ADB-04-T3	794-806/764-776 MHz, 806-816/851-861 MHz, 74dB, High Power B
62-83E-ADB-02-T3***	794-806/764-776 MHz, 806-824/851-869 MHz, 74dB, Low Power
62-83F-ADB-04-T3***	794-806/764-776 MHz 806-824/851-869 MHz 74dB High Power B

# NASPAC CHANNELS APPLICATIONS\*

<b>Model Numbers</b>	Description
62-89B-A03-01-T3	806-809/851-854 MHz 74dB, Low Power, 3 MHz
62-89B-A03-03-T3	806-809/851-854 MHz 74dB, High Power A, 3 MHz
62-90A-A03-01-T3	821-824/866-869 MHz 74dB, Low Power, 3 MHz
62-90A-A03-03-T3	821-824/866-869 MHz 74dB, High Power A, 3 MHz

# SB I SERIES SIGNAL BOOSTERS CELLULAR A, B, & A/B BAND SC\*\*

<b>Model Numbers</b>	Description
62-91A-A11-01-T3	824-835/869-880 MHz 74dB, Low Power, 11 MHz
62-91A-A11-03-T3	824-835/869-880 MHz 74dB, High Power A, 11 MHz
62-91-A25-01-T3	824-849/869-894 MHz 74dB, Low Power, 25 MHz
62-91-A25-03-T3	824-849/869-894 MHz 74dB, High Power A, 25 MHz
62-91B-A14-01-T3	835-849/880-894 MHz 74dB, Low Power, 14 MHz
62-91B-A14-03-T3	835-849/880-894 MHz 74dB, High Power A, 14 MHz

# **CELLULAR FOR HARSH ENVIRONMENTS\*\*** (ALS FEATURE INCLUDED)

<b>Model Numbers</b>	Description
62-91A-A11-01-TR-ALS	824-835/869-880 MHz, 74dB, Low Power, 11 MHz NEMA 4 style enclosure, Alarm & Sampler
62-91A-A11-03-TR-ALS	824-835/869-880 MHz, 74dB, High Power A, 11 MHz NEMA 4 style enclosure, Alarm & Sampler
62-91-A25-01-TR-ALS	824-849/869-894 MHz, 74dB, Low Power, 25 MHz NEMA 4 style enclosure, Alarm & Sampler
62-91-A25-03-TR-ALS	824-849/869-894 MHz, 74dB, High Power A, 25 MHz NEMA 4 style enclosure, Alarm & Sampler
62-91B-A14-01-TR-ALS	835-849/880-894 MHz, 74dB, Low Power, 14 MHz NEMA 4 style enclosure, Alarm & Sampler
62-91B-A14-03-TR-ALS	835-849/880-894 MHz, 74dB, High Power A, 14 MHz NEMA 4 style enclosure, Alarm & Sampler

#### \*ALS OPTIONS

To add Alarm and Sampler features add-ALS to the end of the part. Ex. 62-89A-A18-01-T3-ALS  $\,$ 

#### \*\*CELLULAR BANDS

A= 824-835/869-880MHz B= 835-849/880-894MHz AB= 824-849/869-894MHz

# \*\*\*FCC RULES

The 18 MHz models may not be authorized in your area due to a recent FCC Rule Change. If not authorized in your area, order the 10 MHz models listed









