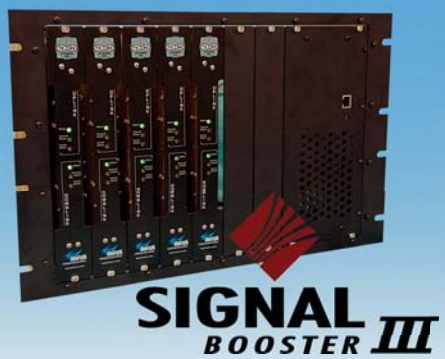

Bird Technologies® TX RX Systems Brand

Channelized Signal Booster

611-70-Series

Bird, TX RX Systems Channelized Signal Booster operates in the 450-512 MHz range available in 1-30+ channels. Intuitive user interface allows booster to be easily configured for changing RF environments. Channel bandwidth is user selectable (12.5, 25, and 12.5 kHz low delay standard or custom). Tone squelch capability is also available and individually configured per channel.

PROBLEMS ▸ SOLUTIONS

Noise and Interference that cause communication problems in a crowded spectrum

- Channelized booster amplifies narrow band channels. Amplifying only the desired spectrum prevents interference to other users

Changes in RF environment

- Modular design facilitates fast and easy reconfiguration, expansion, and redundant capability. User interface also provides maximum flexibility to implement changes to the system such as output power, center frequency, filter shape, and group delay

System coverage is difficult to assess

- Built-in test signal capability allows sim. The 1 kHz FM modulated carrier allows simple SINAD qualification testing.

APPLICATIONS

The Channelized booster provides Public Safety grade reliability and coverage in challenging disadvantaged RF conditions

Use as head end booster for a system that is donored "off the air" in an RF congested area

One channelized booster can connect to any number of broadband boosters (SBII or SBI)

Minimizes noise and interference potential in urban RF congested areas

Channelized Signal Booster

611-70-Series

OPERATING CHARACTERISTICS

Frequency Range	450-512 MHz
Number of Carriers per Channel Module	1 uplink, 1 downlink
Channel Bandwidth	Programmable standard filters include 12.5 kHz, 25 kHz, 12.5 kHz low delay. Other custom filters can be programmed by the user or factory to meet specific system requirements.
Output Power per Channel (Uplink/Downlink)	+17 dBm typical dependent on system configurations with min. -75 dBm Input
Maximum Input Level	-12 dBm maximum, dependent on system configuration
RF Input/Output impedance	50 Ohms
External RF Connectors	N - Female
Alarms	Form-C Contacts, Channel Module LED's
Control & monitoring	Web host via ethernet connection
Power	90-250 VAC, 50/60 Hz or 27.5-29 VDC
Operating Temperature Range	-30 °C to +60 °C
Size**	19" Rack Mount, 7 RU (12.25 in.) x 30 in deep
Weight**	90 lbs
Tone squelch capability (CTCSS and DCS) individually configurable per channel	

** Based on configuration for 5 channel modules power supply and control card. Excludes duplexers and combiners.

OPTIONS

Channels	1-30+
High power	+39.5dBm maximum per channel*
Hybrid Combining or Cavity Combining for higher power out	
Higher Sensitivity on downlink	(already standard on uplink) -75 dBm in for full output instead of -57 dBm
Filtering/Duplexing	3 MHz, 1 MHz, 0.5 MHz or custom
Form-C summed alarm contacts either NO or NC	
Internally generated high accuracy reference for very narrow (6.25 kHz) channels and filters	

*Note: FCC Rules limit per-channel ERP to 5 watts. Standard hybrid combining provided will reduce actual output power to 5 watts or less.

Bird Technologies®

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