



The smallest
full-spec
Base Station/
Repeater in
its class.

S SERIES
Base Station / Repeater

- 30 to 870 Mhz (multiple bands)
- Flexmode™
- 255 Channels
- 50 Watts RF Power
- Programmable Linking
- Community Repeater



1000 Technology Drive • West Melbourne, FL 32909



S SERIES

Base Station / Repeater

Power and performance in a complete radio system solution from BK Radio.

BK Radio's S Series offers system selectivity and superior service in a small package with a small price.

General Specifications:

Frequency ranges (MHz)	30-50 72-88 148-174 216-220 320-350* 345-375* 400-435 450-485 746-764	66-80* 135-160 195-225 320-350* 400-435 485-520 806-870
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*export only

13.8 VDC (110/240 VAC with optional power supply)

Operating Temperature -30C to +60C

255 Channels

LED Indicators Power, Rx, Tx, CTCSS, Aux/Lock, Alarm

Conforms to TIA / EIA 603

Extended low frequency RX discriminator

Fast mute action, fast TX and controlled soft key up

Non-predictive CTCSS decoder

High Temp and VSWR PA protection

Advanced fractional synthesizer design

Channel scan function and base Morse ID

Flexible Configuration

255 RF channel capability with optional operating channels and fully configurable hardware and software for special applications including frequency, power, CTCSS/DCS, RF mode and channel bandwidth.

Feature-Rich Options

Spec your own turn-key radio solution with options like cross-banding, local control, 175-100, 150 Watts RF output power with external amp, Simplex Change over relay, and low standby current. (195mA)

Quality Second to None

Built with advanced modular construction with wide switching bandwidth, good blocking, intermodulation and adjacent channel performance. Rugged, compact housing provides reliable continuous operation under harsh conditions.

Plug & Play Engineering

Compact and lightweight module fits into 19" standard rack mount. Functionally independent TX and RX for easy crossbanding and a RF transceiver for trunked systems.

Easy Programming and Diagnostics

Windows based programming with multi-station control through a single RS232 port and remote monitoring, control and diagnostics functions. Voltage, temperature, VSWR, transmit power, RSSI. VCO volts.

Receiver:

Sensitivity (12 dB SINAD):	< -117 dBm (-120 dBm typical)
Intermodulation Rejection:	-80 dB min.
Spurious & Image Response Rejection:	> -100 dB
Audio Response:	DC to 3000 Hz (-3.0 dB)
Audio Output:	600 Ohms balanced (differential) 0 dBm nominal Adjustable +10 to -15 dBm for 60% System Deviation RF Signal
FM Hum & Noise:	>50 dB Wideband / >45 dB Narrowband
Adjacent Channel:	85 dB Wideband / 78 dB Narrowband
Squelch Threshold:	< 8 dB SINAD
Tight Squelch:	> 20 dB SINAD

Transmitter:

Transmit Output Power:	5 W - 50 W
Transmit Bandwidth:	Full band
Transmit Current Drain:	< 11A
Frequency Stability:	2.5, 2.0, 1.5, or 1.0 ppm
Hum and Noise:	5 kHz - 50 dB minimum 2.5 kHz - 44 dB minimum
Audio Response +1 to -3 dB (Per TIA)	
Spurious and Harmonics:	< -90dBc
Audio Distortion < / = 2% 1000 Hz @ 60% RSD	
Data Capable DC to 3.4 kHz Frequency Response	
Output Impedance: 50 Ohms	

Specifications subject to change without notice. Measurements made in accordance with applicable TIA standards.

FCC Type Acceptance: ARUSR50B (VHF), ARUSR50ABC (UHF), ARUSR35AB (800 MHz), OKRMX800AB (Low Band), OKRMX800R2R3 (700 MHz), OKRMX800FF (200 MHz)

Current RELM Federal Contracts

FEDERAL	GSA
BLM-DOI/NBC 030003	FEDERAL TECHNOLOGY SERVICES GS06T03BND7002
USFS 54-3187-3-328	INFORMATION TECHNOLOGY SCHEDULE GS35F-0133L

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