

The SB2000 analogue base station offers market leading performance in a robust, reliable yet compact 2U form factor. Designed and built to exceed industry standards and all international specifications, it is available in the widest range of frequency bands. When combined with the Simoco Solar Simulcast over IP range of products, it enables the deployment of fully integrated Analogue or Digital P25 Simulcast wide area radio network solutions.

Performance and Reliability

Advanced component, surface mount technology, encased in a rugged machined module, with an optimised PA heatsink to reduce transmitter temperature rise, combine to ensure SB2000's outstanding performance and reliability under the harshest conditions and in continuous operation.

The sensitive receiver features a wide switching bandwidth whilst maintaining good blocking, intermodulation and adjacent channel performance. The broadcast transmitter exciter module has very low spurious emission levels, and is followed by an efficient RF power amplifier.

Features

- Exceptional frequency coverage 30 MHz to 960 MHz
- Per channel programmable parameters: frequency, power, CTCSS, RF mode and channel bandwidth
- Low frequency RX discriminator and TX modulation response enabling paging and data applications
- Functionally independent TX and RX mean crossbanding is easily accomplished
- Non-predictive CTCSS decoder recognising any valid tone & transiting a user associated TX tone
- Low current consumption on both TX & RX



General Specification

Antenna Connector	Rx,Tx both N type Female. (N type Female Simplex relay opt)
Modulation	Analogue - Direct FM two point method
Channel Spacing	Analogue - Programmable 25/12.5 kHz
Channels	100 front panel selectable, 255 PC software selectable
Supply Voltage	13.8 +/- 20% or optional AC mains input
Operating Temperature	-30 to +60°C (-22° to 140°F), -30 or -40°C Conformational test optional

Transmitter Specification

Power Output	50W-100W variants available
Frequency Stability	20PPM, 2.5PPM or 1PPM
Analogue Audio Response	Flat within +1,-3dB across BW
Analogue Audio Bandwidth	300Hz to 3000Hz
Analogue Modulation Distortion	Less than 2% @ 60% deviation

Receiver Specification

Sensitivity	Better than -117dBm for 12dB SINAD, typ -120dBm. P25-Better than -117dBm for 5% BER*
Audio Bandwidth	300Hz to 3000Hz (+1,-3dB)
Intermodulation Immunity	Better than 82dB
Blocking	Better than 100dB at +/- 1MHz point
Distortion	Less than 2% @ 60% deviation

* When used in conjunction with Solar 25, P25 controller.

All specifications are subject to change without prior notice.