

SONIK EXPERTISE



**In PAGING We're
the ONE**

- **Emergency Messaging**
- **HealthCare**
- **Public Safety**
- **Private Paging**
 - **Wide Area**
 - **On-site**
- **High Reliability**
- **Legacy System Support**

For additional Information visit our Web site at www.sonik.com or call us at 1.760.599-2800.

WIRELESS MESSAGING – PAGING BASE STATIONS

WMBS – WIRELESS MESSAGING BASE STATIONS

NEXT GENERATION IN WIRELESS MESSAGING

The WMBS takes the next step in providing the next generation paging Base Station that exceeds companies' needs for mission-critical messaging applications. With user selectable options for **Voice and / or Digital** paging formats, it incorporates SONIK's proven design, integration and manufacturing technology together with acquired intellectual property licensed from Motorola for complex high-performance paging systems.



STATE-OF-THE ART WIRELESS TECHNOLOGY

Using SONIK's RF paging technology, the WMBS takes advantage of today's advancements in scalable, highly reliable, and efficient Digital Signaling Processing (DSP) technology to meet rigid industry standards. As a complete stand-alone system consisting of a transmitter and a site controller, it is extremely reliable and a feature-rich solution.

MODULAR DESIGN FOR OPTIMAL FLEXIBILITY

To meet specialized needs, SONIK utilizes a modularized design for flexible configurations to support specific company network equipment requirements. A typical system can be configured to include a rack mount cabinet with a Paging transmitter/exciter, a Paging Terminal / Encoder, a BSC (Base Station Controller), a router, lowpass filters and isolators, GPS receivers, power supplies and any other ancillary equipment required.

SUPERIOR SUBSYSTEM COMPONENTS

The WMBS's high reliability has its foundation in the individual subsystems built by SONIK. Each are designed and manufactured to the highest quality standards. The optional controller can be integrated with network communication protocol support and GPS synchronization for precise timing. For VHF, UHF, 900MHz voice and digital paging, the **SONIK VHF/UHF/900 Analog/Digital Paging Transmitter** is designed to meet the paging industry's latest standards for high speed POCSAG and voice simulcast operation. FLEX 2 &/or 4-level protocol and 900MHz freqs. are also available in the WMBS.

LEGACY SYSTEM SUPPORT

The WMBS operates with a wide range of standard network interfaces, and is ideal for both new systems as well as upgrading of existing paging networks. Other versions of the WMBS optionally support OPP, I20, SYLC and SuperStream protocols and can interface with C2000, C-Net, RF Conductor BATON, Zetron and other controllers. Support for all modern digital paging formats including POCSAG, FLEX, GOLAY, ReFLEX and ERMES is available.

POSITIONED FOR THE FUTURE

SONIK designed and developed the Next Generation Wireless Messaging Base Station to provide users with an avenue to effectively renew their investments in paging and extend the useful life well into the future.

Features

- MEETS FCC NARROWBAND RE-FARMING REQUIREMENTS: RECEIVED VA AND NTIA APPROVALS
- SUPPORTS LEGACY SYSTEM PROTOCOLS OPP, SUPERSTREAM, I20, SYLC
- VOICE, POCSAG, FLEX AND REFLEX PAGING FORMATS SUPPORTED
- EMULATES MOTOROLA NUCLEUS BATON & NIU FEATURES WITH ENHANCEMENTS TO NETWORKING, ALARMING, MANAGEMENT, AND RELIABILITY
- COMPATIBLE C2000, C-NET, ZETRON, & OTHER CONTROLLERS
- MODULAR DESIGN FOR EASY UPGRADING AND FIELD SERVICE
- OPTIONAL GPS RECEIVERS FOR PRECISE SIMULCAST TIMING
- ROUTER, CONTROLLER AND TRANSMITTER COMBINED IN ONE RACK CABINET
- REDUCED SIZE, WEIGHT, AND POWER CONSUMPTION
- HIGH RELIABILITY 100W – 500W MODELS
- CAN BE CONFIGURED WITH PAGING TERMINAL / ENCODER



WIRELESS MESSAGING- *sample only- specs may vary* WMBS – WIRELESS MESSAGING BASE STATIONS

ABOUT SONIK

SONIK is a global provider of innovative technology solutions that empower our customers to access their information or content anytime, anywhere. With over 20 years of technology management and industry expertise, we focus on providing clients with proven experience and management expertise in these business solutions:

- INTEGRATED COMMUNICATIONS
- PAGING EQUIPMENT
- PAGING SYSTEMS
- VOTED SYSTEMS
- MOBILE COMPUTING
- PUBLIC SAFETY
- UTILITIES

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Function	Specification
Operating Frequency Range	136-174, 400-512, 921-941MHz
Modulation Modes – Analog & Digital Capable	2 level FSK, 512, 1200 & 2400 bps or 4-level 1600, 3200, or 6400 baud
Number of Channels	32
Frequency Stability	0.05 to +/- 1.5 ppm standard (-30 to +60C); +/- 0.0002ppm with optional GPS reference source.
Duty Cycle	100% Continuous Duty
Spurious & Response	70dB
Audio Distortion	< 0.5% at 1000 Hz (VHF), < 1% at 1000Hz (UHF)
Adjacent Channel noise	< -70dBc
FM Hum and Noise	55dB (wide), 50dB (narrow)
TX Intermodulation	< -70dBc
RF Power Output	VHF- variable 75-150 watts, 250, or 500 watts UHF- Variable 50- 125 watts, 300W
Channel Spacing	25KHz, 12.5KHz (FCC & NTIA approved 12.5KHz)
Emission designators	16K0F3E (wide), 11K0F3E (narrow)

Typical Specifications (Vary Per Transmitter and BS Controller Models)

NETWORK & PROTOCOL SPECIFICATIONS –Varies by Controller

Transmitter Protocol	POCSAG, GOLAY, Analog (FLEX optionally avail)
Typical Controller used	Zetron Model 66 for remote voice and digital paging. Zetron Model 620 used for digital only paging with GPS-based simulcast synchronization.

MECHANICAL SPECIFICATIONS

Weight	Varies based on requirements Available in EIA 19" open or closed racks/cabinets
Additional Hardware	SONIK will custom design to customer requirements (isolator, filters, etc. avail. options)
Size- this is an example. Size and weight varies based on customer requirements.	H = 23"(58 cm) W = 23.5"(60 cm) D = 20" (51 cm)

COMMUNICATIONS INTERFACE SPECIFICATIONS – Varies Per Controller

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature (typical)	-30 to +60 deg C,
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Specifications subject to change without Notice