



ALTOBRIDGE



"The end is
where we
start from."

T.S. Eliot,
Four Quartets.

First Responder - Emergency / (Suitcase) Solution

After the devastating natural disasters and terrorist atrocities that have occurred throughout the world in the first years of the new millennium, First Responders and Emergency Personnel are turning to standard cellular communications as a means for always available secure data and voice communications.

The AltoBridge Remote Contiguous Communications RCC Unit is a fully portable suitcase size solution, combining the latest cellular and satellite technology, enabling wireless coverage for any emergency situation. First Responders and Emergency Personnel will be back live on their existing mobile phones in minutes. Connectivity to the core wireless network can be over multiple satellite alternatives, ensuring total flexibility. First Responders and Emergency Personnel will finally have a totally reliable always available secure service. No training requirements for users, the cost efficiencies of the AltoBridge patented architecture and the economies of scale of standard international wireless communications devices e.g. PDA's Blackberry's etc. are just some of the key advantages of this system over traditional 'one time' emergency solutions.

The Cellular Operator benefits from a significant reduction in churn as governments and corporations sign up to long term relationships with this service, providing an important insurance for potential emergency situations. From a network planning perspective, these units will only be enabled on highly critical occasions where the macro wireless network is not available and the AltoBridge system can automatically tear down as the network returns.

Key Benefits

- A fully managed service with 24/7 support and guaranteed connectivity e.g. in a disaster situation with a local communications network outage, the Remote Units will operate seamlessly via multiple redundant network e.g. satellite linkage to multiple switches.
- Proprietary AltoBridge functionality can provide First Responders and Emergency Personnel with priority access to the network in a crises situation.
- A highly compact Remote Unit ensures continuity of wireless communications for out of coverage situations e.g. remote state wide communications, border patrols and First Responder/Emergency situations.
- Easily portable and cost effective ensuring availability to all agencies in all locations meeting all remote communications and maximum First Responder/Emergency situations.
- Secure inter agency communications for both voice and data using government approved end to end encryption technologies for voice and secure data e.g. mail.

FURTHER INFORMATION

Additional technical, commercial and market information is available by contacting us directly.

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ALTOBRIDGE

Technical Specifications

TRANSMIT/RECEIVE FREQUENCIES

GSM 900 Transmit:	935 – 960 MHz
GSM 900 Receive:	890 – 915 MHz
GSM 1800 Transmit:	1805 – 1880 MHz
GSM 1800 Receive:	1710 – 1785 MHz
GSM 1900 Transmit:	1930 – 1990 MHz
GSM 1900 Receive:	1850 – 1910 MHz
Channel Spacing:	200kHz
Max Output Power:	+23dBm(w/out amp)
Static Power Control:	12 Steps (2dB)

ANTENNA

Internal(200m):	On-board OdBi Omni-Directional (nominal)
External (5Km):	Optional

CHANNEL SUPPORT

- Single TRX
- 7 Active User Timeslots (4 per 64kbps)
- Up to 4 units (1 nanoBTS/unit) can be connected for Multi-TRX support

TSO CONFIGURATION

- FCCH + SCH + BCCH + CCCH + SDCCH/4 + SACCH/C4 (for CO TRX only)

TS1-7 CONFIGURATION

- FCCH + SCH + BCCH + CCCH + SDCCH/4 + SACCH/C4 (for CO TRX only)
- FCCH + SCH + BCCH + CCH (for CO TRX only)
- TCH/F + FACCH/F + SACCH/TF (for non-CO TRX only)

INTERNAL CLOCK FREQUENCY

Accuracy:	+/- 20ppb
Aging:	+/- 30ppb/yr

SIGNALLING & TRAFFIC

Abis:	Abis/IP
Signalling, O&M:	TCP/IP
Traffic (Voice.CSD):	RTP/UDP/IP
Traffic (GPRS) UDP/IP	

NETWORK MANAGEMENT

- Dedicated management package (OMC-R)
- Open interfaces for integration with partner-specific O&M
- 12.21 procedure for software upgrades
- DHCP

CIRCUIT-SWITCHED DATA

- Single Slot BS20 at up to 14.4kb/s
- BS21-26, plus BS61, BS81

TELESERVICES

- Telephony
- Short Message Service MT/PP
- Short Message Service MO/PP
- Short Message Service CB

SPEECH FORMAT SUPPORT

- GSM FR and EFR
- AMR HR and FR

ENCRYPTON SUPPORT

- A5/1, A5/2

GPSR SUPPORT

- Coding Schemes 1 – 4
- Multi-slot Class 10
- Dynamic PDH for optimizing mix of service for voice/data

NETWORK INTERFACE

- RJ45 AUTO-SELECT 10/100 Ethernet

NETWORK REACHBACK

- IP VPN Tunnel
- Satellite (GAN*, BGAN*, VSAT)
- LAN (Ethernet, WiFi)

SERVER SPECIFICATIONS

- Embedded Server with Touch Screen configuration

TRANSIT CASE

- STORM IM2720 w/Wheels (Standard)
- Internal Shock Mounting for Components
- Dual-Case Configuration (optional)