ANDREW®
Wireless Solutions

MRx18 miniRepeater

Cost-Effective Indoor
RF Enhancers for all
Services and Standards.
The New Era of miniRepeater!

CommScope®

MRx18 - High Flexibility and Easy Commissioning

Andrew will provide the new MRx18 miniRepeater family which is an enhancement of the existing miniRepeaters where already existent functions were wed with flexibility and cost-effectiveness.

The MRx18 miniRepeater is a bi-directional amplifier used to enhance signals between a mobile and a base station in indoor applications. It has been designed to increase signal strength in small and medium sized areas such as offices, shops, and basements. By boosting the signal level it increases indoor coverage and allows high data rate connectivity.

The MRx18 miniRepeater is easy to install. Also a web-based Local Maintenance Terminal (LMT) simplifies to commission the equipment. The RF link (donor) towards the base station is typically fed from an outdoor antenna while the coverage area is fed by an indoor antenna. The design of the amplifier maintains the spectrum and spurious emission requirements pretended by various standards. The opportunity to adjust the passband of the repeater helps to cover any specific segment of the desired frequency range and enables to follow network migration to 3G, 4G, and beyond without additional hardware upgrades. Furthermore, due to a modular design the single variable MRx18 version can be extended to a triple variable segment or a dual band variable version in one cabinet. Auto-gain functionality enables automatic gain adjustment in order to maximize the performance - however, gain may be set manually if desired. An alarm interface with LEDs indicates the status of the equipment and also the received signal strength locally.

Repeater Supervision and Alarming

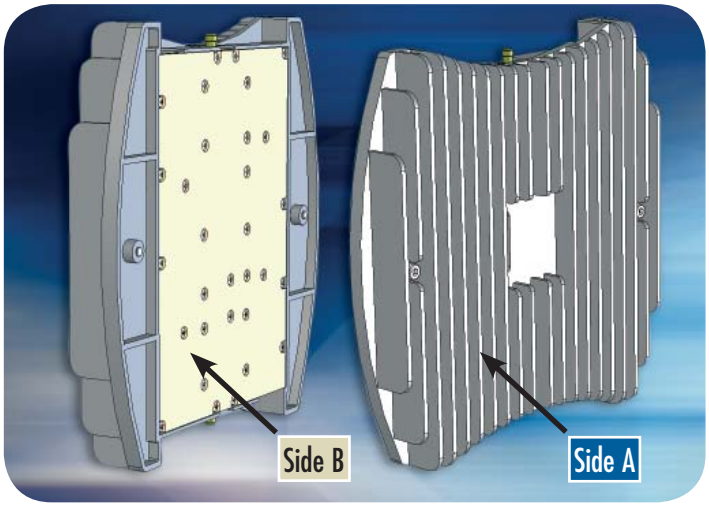
The MRx18 miniRepeater has an optional remote monitor function that provides equipment alarming via SMS. Alarms (Including heart beat) can be sent to the common Andrew OMC (A.I.M.O.S.) or to any standard SMS receiver. Moreover the MRx18 miniRepeater can be connected to LAN.

Advantages

- Easy to install due to light weight, small dimensions and auto-gain functionality
- Auto-gain to cope with changing RF evironment
- Local Received Signal Strength Indicator (RSSI)
- Easy commissioning via web-based LMT (Ethernet)
- Variable bandwidth with up to 25 MHz
- Automatic level control (ALC)
- Multi-functional miniRepeater family modularity (triple segment or dual band)
- Optional remote alarm monitoring

Discover Undreamed-of Band and Segment Combinations

The MRx18 single band can be extended up to a triple variable segment or a dual band variable version with one variable bandwidth per frequency band. The modular design allows to settle all combinations in one housing where the basic housing can be extended by a second half-shell **Side B** which is mounted onto the back of the basic housing **Side A**.



Possible MRx18 Combinations (Dual/ Triple Segment and Dual Band)

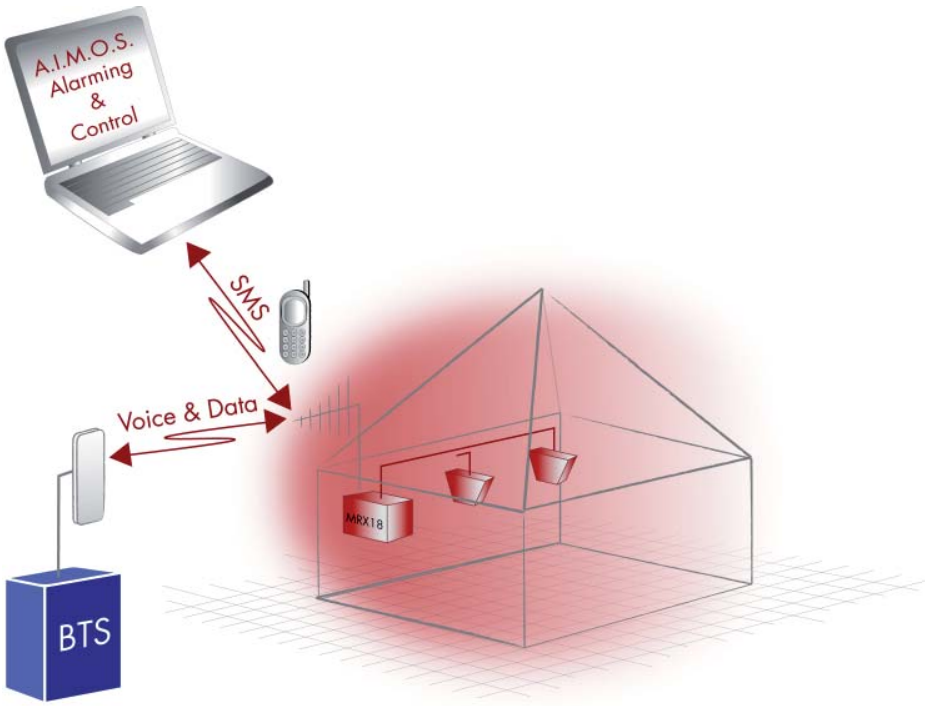
Side A \ Side B	Single Band	MR8018	MR8518	MR9018	MR918	MR1718	MR1818	MR1918	MR2118
MR7018	x							x	
MR8018	x			x				x	
MR8518	x		x					x	
MR9018	x								
MR918	x				x (up to 3 segments)		x		x
MR1718	x					x		x	
MR1818	x						x		x
MR1918	x					x		x (up to 3 segments)	
MR2118	x				x				x

Basically for dual band variable version supports one segment of the frequency band assembled in half shell **Side A** and up to two segment in half shell **Side B**. For dual/triple variable segment version one segment is located in **Side A** and the other two segments are implemented in **Side B**. For any other combinations please contact Andrew.

Frequency and Data Overview

Frequency range	Gain, dB	Gain adjust range, dB	UL noise figure, dB	UL/DL Pout 1 carrier, dBm/c	UL/DL Pout 2 carriers, dBm/c	UL/DL Pout 4 carriers, dBm/c	Repeater
LMR 700	70	40 to 70	7.0	24.0	21.0	18.0	MR7018
LMR 800	70	40 to 70	7.0	24.0	21.0	18.0	MR8018
Cell 850	70	40 to 70	7.0	24.0	21.0	18.0	MR8518
LMR 900	70	40 to 70	7.0	24.0	21.0	18.0	MR9018
GSM-R 900 (E)GSM 900 UMTS 900	70	40 to 70	7.0	18.0	15.0	12.0	MR918
AWS 1700	70	40 to 70	7.0	18.0	15.0	12.0	MR1718
GSM 1800 UMTS 1800	70	40 to 70	7.0	18.0	15.0	12.0	MR1818
PCS 1900	70	40 to 70	7.0	24.0	21.0	18.0	MR1918
UMTS 2100	70	40 to 70	7.0	18.0	15.0	12.0	MR2118

Application Example



Scenario: Alarming and Supervision Control via A.I.M.O.S.

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Visit our Web site or contact your local Andrew Wireless Solutions representative for more information.

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