



WiMAX REPEATER

- ◆ Repeater for FDD WiMAX Systems
- ◆ Cost-effective way to extend Base Station footprint for additional subscribers.
- ◆ Bypass Line-Of-Sight obstacles
- ◆ Provide better in-building coverage.
- ◆ Programmable Frequencies

PRODUCT APPLICATION:

The WiMAX repeater is a two-way radio system designed to expand coverage of a WiMAX Base Station to “dark” areas.

The repeater allows system operators to bypass direct Line-Of-Sight obstacles between the base station and areas with new subscribers, extending coverage beyond the Base Station standard range.

Another application is to provide better service inside large buildings.

The repeater consists of two outdoor transceivers (local and remote) designed to minimize the cable lengths to the input and output antennas.

The repeater performs downconversion of input signals and upconversion and amplification of output signals.

IT features bi-directional programmable frequency translation capability to avoid self interference and to simplify the frequency planning process.

An ALC (Automatic Level Control) circuit provides a stable output signal regardless of weather and other transient conditions.

Monitoring and control can be performed remotely via SNMP.

The only connection requirement from the outside is a power feed. Nominal power is 120-140 VAC, but DC powering is available as an option.

Model OAR3.5b-002d

Electrical Specifications	
Operating RF frequency range	Band 3.5b 3450 to 3500 MHz Transmit 3550 to 3600 MHz Receive
Operating Mode	FDD Standard 802.16d
Transmit/Receive Separation	100 MHz
Frequency Step Size	0.125 MHz
Channel Bandwidth	3.5 MHz
Output Power	+27 dBm US, +24dBm per carrier DS @3.5MHz BW
Noise Figure	6 dB
Gain	80 dB (max)
Total Phase Noise	-33 dBc total integrated phase noise (from 6.8KHz to 4 MHz)
Delay	Less than 50 nanoseconds
Other Specifications	
Management and Monitoring	SNMP
Antenna RF connector	N Female
IF connectors	TNC Female
Dimensions W x H x D	46 cm x 30 cm x 11.5 cm each housing
Weight	4 Kg each housing
Line Voltage and Current	120/220/240VAC 50 VA total
Mounting	Outdoor
Environmental	-33° to +50° Centigrade, 99% humidity

¹ Specifications subject to change without prior notice.

² Optional: Band 3.5a
3399.5 to 3453.5 MHz Transmit
3499.5 – 3553.5 MHz Receive