

## **FCC ID: O2J-375AS Operational Description**

Airsynergy A36 is part of Airspan's broadband fixed cellular wireless access system, operating in the 3650-3700 MHz band.

The unit can be deployed as:

- A traditional basestation
- **Or**, deployed as a pair of units to extend/improve coverage for existing systems. When deployed as a pair the units are arranged with one configured as Feeder Base and one as Feeder Terminal, using Netspan Management software.

Contention Based Protocol is implemented as a base station for the Feeder Base unit and as a terminal device for the Feeder Terminal (see separate document for more details)

The Airsynergy WiMAX/802.16 transceiver operates in OFDMA mode with the following characteristics:

<b>Configuration</b>	Basestation, Feeder Base or Feeder Terminal
<b>Frequency range:</b>	Frequency of operation is aligned FCC part 90Z and operates within the 3650-3700 MHz band: <ul style="list-style-type: none"><li>• 5 MHz channels: Centre frequencies of 3652.5 to 3697.5 MHz</li><li>• 10 MHz channels: Centre frequencies of 3655.0 to 3695.0 MHz</li></ul>
<b>Duplex mode:</b>	TDD
<b>Channel BW:</b>	5 and 10 MHz
<b>Max Output Power:</b>	2 x 26 dBm (26 dBm per port, MIMO mode) for 5 MHz channels 2 x 26.5 dBm (26.5 dBm per port, MIMO mode) for 10 MHz channels
<b>Modulation rates:</b>	BPSK, QPSK, 16QAM, 64QAM, 256QAM

The maximum RF output power at each of the antenna ports can be reduced by software.

The unit is installed outdoors and typically is mounted on a pole and provides subscribers with "always-on" Internet, high speed data only, or data and voice (VoIP) services and is configured with a unique base station reference number, preventing the Subscriber from relocating to another subscriber premises without authorization.