



Technical Note

LTE 1900MHz

Synergy 2000- Band 2&25

Connecting the World with Wireless Access Solutions

Synergy 2000- Band 43		
Pub/ Rev	Date	Update Description
01	August 05	
Publication No. 28080512-01		

The information contained in this document is proprietary and is subject to all relevant copyright, patent and other laws protecting intellectual property, as well as any specific agreement protecting **Airspan Networks LTD.** rights in the aforesaid information. Neither this document nor the information contained herein may be published, reproduced or disclosed to third parties, in whole or in part, without the express, prior, written permission of **Airspan Networks LTD.** In addition, any use of this document or the information contained herein for any purposes other than those for which it was disclosed is strictly forbidden.

Airspan Networks LTD. reserves the right, without prior notice or liability, to make changes in equipment design or specifications.

Information supplied by **Airspan Networks LTD.** is believed to be accurate and reliable. However, no responsibility is assumed by **Airspan Networks LTD.** for the use thereof nor for the rights of third parties which may be effected in any way by the use thereof.

Any representation(s) in this document concerning performance of **Airspan Networks LTD.** product(s) are for informational purposes only and are not warranties of future performance, either express or implied. **Airspan Networks LTD.** standard limited warranty, stated in its sales contract or order confirmation form, is the only warranty offered by **Airspan Networks LTD.** in relation thereto.

This document may contain flaws, omissions or typesetting errors; no warranty is granted nor liability assumed in relation thereto unless specifically undertaken in Airspan Networks LTD. sales contract or order confirmation. Information contained herein is periodically updated and changes will be incorporated into subsequent editions. If you have encountered an error, please notify Airspan Networks LTD. All specifications are subject to change without prior notice.

1. Scope

This document provides a description of the LTE Synergy product.

2. Synergy (Base Station)

A Base station radio, Synergy 2000 1.9 GHz - Band 2&25 TDD LTE, is a part of LTE broadband fixed cellular wireless access system. The system provides a radio link between an end-user (a subscriber) and a network to give high-speed data access. The Synergy's transceiver/receiver (Up to 64 QAM modulation, data rate up to 150 Mbps) uses OFDM and operating in TDD mode, equipped with a 17 dBi external antenna. The maximum total RF output power (not including antenna gain) is 35.53dBm for 17dBi and it can be reduced by software.

The Synergy is installed outdoors and typically is mounted on a pole. The Subscriber transmits and receives traffic to and from the base station respectively. The transceiver 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 LTE UE from relocating to another subscriber premises without authorization.

2.1. EUT (Air4G) test configuration

The EUT ports and lines description is given in the table below.

Port type	Port description	Connector type	Quantity	Cable length (m)	Indoor /outdoor	Connected to
DC	48 VDC	DC Connector	1	100	Outdoor	DC P.S
Data	Ethernet	RJ 45	1	100	Outdoor	Eth. Switch