



FCC RF Profile Designation

Software Release 9.0





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1 About this Guide

This document discusses the specific USA-specific Netspan which will only enable the operation in the approved lower 25MHz.

1.1 Conventions

This document uses the following informational conventions.

Icon	Description
	Checkpoint: Marks a point in the workflow where there may be an exit or branch to some other procedure. At each Checkpoint the reason for an exit or branch is given along with specific directions to locate the entry point in the other procedure.
	Reference: Gives a resource in the workflow that may be needed to complete a procedure along with specific directions to use the resource.
	Caution: Describes a possible risk and how to lessen or avoid the risk.
	Advice: Provides a recommendation based on best practice.
	Note: Provides useful information.

2 Overview

Netspan is a Element Software Management (EMS) comprehensive management solution that manages the network elements in the WiMAX family, which consists of WiMAX-compliant Base Stations (BS) and Subscriber Stations (SS). Netspan is a client-server application, with always-on server components implemented as windows services, and with a front end web application. Netspan uses SNMP to communicate with BS equipment, as well as third party WiMAX-compliant SS devices. It can be adjusted to meet customer requirements through its flexible configuration options.

The key features associated with Netspan are as follows:

- Fault management with comprehensive event, active alarm and historical alarms system
- Configuration management with provisioning, configuration, status tracking and reporting, software upgrade and inventory management for BS TRxs, Subscriber Stations and other associated network elements
- Performance management with collection of wide range of historical statistical data
- Security management with EMS authentication and authorisation as well as with secure SNMP communication to equipment.
- FCC configuration limitation as per FCC CFR 47 Part 90 subpart Z.

Netspan EMS adds **mobile** product features that include the following:

- Support for both mobile and fixed WiMAX platforms
- Support for mobile Master Station (MS)
- 802.16d (IEEE Standard 802.16-2004) SS is configured for service on the network; does not have to be tied to a fixed BS TRx (although can be)
- Supports 802.16e
- SQL database engine for Netspan database
- Indirect management of SS (MIB model)
- Template/class based provisioning
- Asynchronous configuration for provisioning data
- Synchronous configuration for commissioning data
- Asynchronous status and statistics collection
- Full off-line provisioning capabilities
- Database is a master for provisioning data.
- Re-synchronisation between equipment and EMS on request.

Further explained below:



Note: The following are for illustration only; actual screens may differ as per particular installation.



Note: MacroMAXe is shipped to the USA with a special USA-specific Netspan which will only enable the operation in the approved lower 25MHz.

3 Verify FCC RF Configuration Setting

1. Open Netspan.
2. Navigate to BS TRx Channel (16e).
3. Select the FCC designated profile (MacroMAXe is shipped to the USA with a special USA-specific Netspan), as displayed below:

RF Profiles (16e)

System Warning!
 • This session is open using built 'admin' account. The 'admin' account should only be used for system administration purposes (e.g. creation of user accounts). It has limited GUI capabilities (e.g. no layout saving). Please use named user account to [login](#) or create a [new account](#).

List

Search

	Name	Target Hardware	Uplink Center Frequency	Downlink Center Frequency	BS Eirp (dbm)	Initial Ranging Eirp (dbm)	Tx Power (dbm)	Tx Power Reduction	RF Gain (dbm)	Rx Level Setpoint (dbm)	Enable Ms Tx Power Limit	Ms Tx Power Limit Value	Power Control Mode
1	MMXe_365G_32dbm	HiperMAX	3650000	3650000	22	0	22	-6	138	-95	<input type="checkbox"/>	0	Close Loop
2	MacroMAXe 3605 FCC (3650-3675)	MacroMAXe-4	3655000	3655000	37	0	35	-6	138	-95	<input checked="" type="checkbox"/>	0	Close Loop
3	MMXe_3405_342GHz_30dbm	MacroMAXe	3420000	3420000	30	-94	30	0	39	-64	<input type="checkbox"/>	0	Close Loop
4	MMXe_3405_345GHz_30dbm	MacroMAXe	3450000	3450000	30	-94	30	0	39	-64	<input type="checkbox"/>	0	Close Loop
5	MMXe_3405_348GHz_30dbm	MacroMAXe	3480000	3480000	30	-94	30	0	39	-64	<input type="checkbox"/>	0	Close Loop
6	MMXe_3405_349GHz_15dbm	MacroMAXe	3490000	3490000	15	-94	15	0	39	-64	<input type="checkbox"/>	0	Close Loop

Figure 1 - FCC designated profile

4. Open to view RF Profile (16e), as displayed below:

RF Profile (16e)

Name:

Profile Type:

Target Hardware Category:

Downlink Channel

Frequency: kHz

EIRP: dBm

Tx Power: dBm Total Combined Tx Power: dBm

Tx Power Change in GPS Degraded State: dBm Tx Power In GPS Degraded: dBm

Uplink Channel

Frame Duplex:

Frequency: kHz

Rx Level Set Point: dBm

Initial Ranging EIRP: dBm

RF Gain: dB

Channel Properties For MSs

MS Tx Power Limit:

Power Control Mode:

Carrier Sense Detection

Carrier Sense Detection:

Carrier Sense Threshold: dBm

Carrier Sense Backoff Frames:

Figure 2 – FCC RF Profile



Note: Netspan does not allow changing the operating frequencies from 3650 – 3675 as designated.



4 Contact Information

Customer Service Help-Desk for customer service emergency

Airspan Networks have introduced the Airspan Tracker application to enable prompt and efficient Customer Support services.

If you do not have an Airspan Tracker account, please obtain login credentials by filling-in the form in the main page www.airspan.com/Support Register New Account

Worldwide Headquarters:

Airspan Networks Inc.
777, Yamato Road, Suite 310,
Boca Raton, FL 33431, USA
Tel: +1 561 893 8670

www.airspan.com

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