



Technical Note

WiMAX 4.9 GHz

ProST EasyST 4.9GHz

Connecting the World with Wireless Access Solutions

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1. Scope

This document provides a description of the WiMAX 4.9 GHz product.

2. ProST

A subscriber premises radio, ProST 4.9 GHz TDD Int., is part of a WiMAX 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 ProST's transceiver/receiver (Up to 64 QAM modulation, data rate up to 36 Mbps) uses OFDM and operating in TDD duplexing mode, equipped with a 17 dBi internal antenna. The maximum RF output power (not including antenna gain) is 20.8 dBm and it can be reduced by software.

The ProST is installed outdoors and typically is mounted on a pole. The ProST transmits and receives traffic to and from the base station (i.e. BSR) 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 BSR reference number, preventing the ProST from relocating to another subscriber premises without authorization. The ProST radio has the same PCB components as the EasyST, and differs only chassis and 48V adapter.

2.1. EUT (ProST) test configuration

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

Port type	Port description	Connector type	Quantity	Cable type	Cable length (m)	Indoor /outdoor	Connected to
Data + DC	48 VDC + Ethernet	15-pin D-type	1	Cat. 5 – 4x2 twisted pair	100	Outdoor	SDA

3. EasyST

A subscriber premises radio, EasyST 4.9 GHz TDD Int., is part of a WiMAX 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 EasyST's transceiver/receiver (Up to 64 QAM modulation, data rate up to 36 Mbps) uses OFDM and operating in TDD duplexing mode, equipped with a 9 dBi Ext. antenna. The maximum RF output power (not including antenna gain) is 20.8 dBm and it can be reduced by software.

The EasyST is a safe install unit and located indoor. The EasyST transmits and receives traffic to and from the base station (i.e. BSR) 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 BSR reference number, preventing the EasyST from relocating to another subscriber premises without authorization.

3.1. EUT (EasyST) test configuration

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

Port type	Port description	Connector type	Quantity	Cable type	Cable length (m)	Indoor /outdoor	Connected to
DC	6 VDC	DC	1	-	1	Indoor	DC PS
RJ45	Ethernet.	RJ45	1	RJ45	1	Indoor	PC
Antenna	RF output/input	MCX	1	-	-	Indoor	External antenna