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SILVERNET

WiMAX Integrated

SKU: SILMAXi

■ Features

➢ROHS Compliant

➢802.16d-2004 WiMAX

➢Operate at 3.5GHz

➢Non Line of Sight (NLOS)

➢Full support for Sub-Channelisation

➢High spectral efficiency

➢Efficient bandwidth allocation

➢Dynamic power control

➢Built-in panel antenna for 3.5GHz

➢Resistant design for outdoor environment (IP65)

➢SNMP support

➢Signal Status Display by LED Line

➢POE

■ *What is the WiMAX Integrated?*

The WiMAX Integrated benefits from WiMAX technology, delivering the best economics and advanced wireless solution for fixed broadband access.

Operating at 3.5GHz(*5.8GHz) with Orthogonal Frequency Division Multiplexing (OFDM) and non-line-of-sight (NLOS) technology helps to overcome common urban obstacles

The WiMAX Integrated comes with 802.3af Power over Ethernet (PoE) support making it easy and fast to install. It also has a built-in antenna and waterproof design ideal for Outdoor applications

■ *The advantage of the WiMAX Integrated*

●Lower total cost of your Point to Multipoint wireless access system
●SNMP and AAA (Authentication, Administration and Authorization) support for operation and maintenance

Contents

•WiMAX Unit	×1
•Product CD	×1
•Power Adapter	×1
•DC Injector	×1
•Power Cable	×1
•Fixed settings	×1
•Installation Guide	×1

System

Operation Mode	CPE
IP Router	Yes
NAT	Yes
Access Control	Yes
Flow Control	Yes
DHCP	DHCP Client/DHCP Server
NTP	Yes
HTTP Redirect	Yes
Watchdog	Yes

Features

QoS	Yes(rtPS/nrtPS/UGS/BE)
Encryption	DES/AES
DFS(Dynamic Frequency Selection)	Yes
ARQ(Automatic Repeat Request)	Yes
PHS(Payload Header Suppression)	Yes
Site Survey	Yes

Radio

Standard	IEEE 802.16-2004, HiperMAN/WiMAX Fixed Profile
Modulation	OFDM[BPSK, QPSK, 16-QAM, 64-QAM]
Frequency	3.4 to 3.6 GHz in steps of 250kHz
Bandwidth	1.75MHz, 3.5MHz & 7MHz
PHY	OFDM/FFT
Duplexing Method	TDD and HFDD
Spectral Efficiency	5 bits/sec/Hz (64-QAM uncoded)
Supported Frame Lengths	2.5,4,5,8,10 & 20 ms
Supported Cyclic Prefix Lengths	1/4,1/8,1/16,1/32
Tx Maximum output Power (at antenna connector)	20.5dBm
Tx Center Frequency Tolerance	$< \pm 2\%$ subcarrier spacing
Symbol Clock Frequency Tolerance	$< \pm 5$ppm
Frequency Control	Automatic Frequency Control (AFC)
Spectral Mask Requirements	Type-G mask ETSI-EN301021
Power Control	Automatic Gain Control (AGC), Automatic Link Control (ALC)

Adjacent Channel Rejection C/I	16-QAM 3/4	64QAM 3/4
	-11dB	-4dB

Nonadjacent Channel Rejection C/I	16-QAM 3/4	64QAM 3/4
	-30dB	-23dB

Distributed by:

Relative Tx Constellation Error (@20.5dBm output power)	Burst Type	Typical [dB]
	BPSK 1/2	-31.5
	QPSK 1/2	-31.5
	QPSK 3/4	-31.5
	16QAM 1/2	-31.5
	16QAM 3/4	-31.5
	64QAM 1/2	-31.5
	64QAM 3/4	-31.5

Maximum Rx Receiver Sensitivity (BER <10-6)	Burst Type	Typical [dB]
	BPSK 1/2	-95.0
	QPSK 1/2	-93.0
	QPSK 3/4	-89.5
	16QAM 1/2	-86.5
	16QAM 3/4	-83.0
	64QAM 1/2	-79.0
	64QAM 3/4	-77.0

Management

Secure WEB Management	Yes
SNMP	Yes (SNMP V1/2)
SSH	Yes
CLI	Yes
F/W Upgrade	Web/TFTP/FTP
Backup Settings	Web/TFTP/FTP

Interface

LAN	One 10/100-BaseTX RJ-45 Ethernet Port
Antenna Type (Built-in)	16dBi pannel antenna
Default Button	Yes
Ground Interface	Yes
Led	1-Power, 1-WLAN, 1-LAN, 5-Signal Indicator

Physical

Dimension (mm)	292x288x84
Weight (Kg)	1.4
Power Consumption	10W
Power Supply	PoE,802.3af compliant, Remote Power 48V@500mA

Environment

Operating Temperature	-20℃~65℃
Operating Humidity	5 ~ 95% Non-Condensing
Storage Temperature	-40℃~85℃
Storage Humidity	5 ~ 95% Non-Condensing
Waterproof	IP65
Lead-free	RoHS Compliant
Warranty	12 months