WinLink™1000 Family

High Capacity License Exempt Radio Relay

Features

- **High data rate of up to 48Mbps**
- **Long range of up to 80 Km**
- **Integrated solution for E1/T1s and Ethernet interfaces**
- **Carrier-class solution**
- **Compliant with FCC and ETSI regulations**

Description

WinLink1000 family of products is a carrier-class, high capacity and low cost Point to Point broadband wireless transmission system. It packs Legacy TDM and Ethernet services over 5.x GHz unlicensed bands and is suitable for deployment in FCC or ESTI regulated countries.

WinLink1000, which provides high capacity connectivity of up to 48 Mbps, allows for the rapid deployment of E1/T1s and Ethernet links at a fraction of alternatives cost.

WinLink1000 is based on RADWIN's SmartPacket technology, which enables high performance and reliability.

WinLink1000 is the right solution for customers requiring immediate deployment of affordable carrier-class high capacity connectivity in the license exempt frequencies.

Benefits

Short Time to Service

- License exempt frequencies remove regulatory delays

- Wireless connectivity instead of private line leasing from service providers
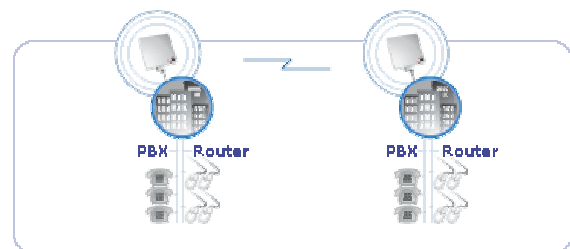- Compact integrated solution that is simple to install and operate

Carrier Class Solution

- High reliability and availability based on robust air-interface
- TDM transmission complies with all Telecom requirements.

Typical Applications

Remote Sites' Connectivity

WinLink1000 is offered to enterprises with multiple sites that require a cost effective and transparent connection of their LAN and PBX systems across their various campuses

Broadband Access

WinLink1000 provides broadband access services, such broadband Ethernet and Leased Lines, to Small and Medium Enterprises (SME).

Backhauling

WinLink1000 backhauls traffic from cellular base stations, Hotspots or point of presence (POP) of wireless ISP's to backbone network.

Specifications

Configuration

- **Architecture**
  Indoor Unit (IDU) and
  Outdoor Unit (ODU)
- **IDU to ODU Interface**
  Outdoor CAT-5 cable
  Maximum length of
  100m

Radio

- **Frequency**
  5.725 – 5.850 GHz
  5.470 – 5.725 GHz
- **Data Rate**
  Configurable up to 48Mbps
  Channel BW
  20MHz
- **Duplex Technique**
  TDD
- **System Gain**
  160dB
- **Modulation**
  OFDM - BPSK, QPSK,
  16QAM, 64QAM
- **Transmit Power**
  FCC: 18dBm (max)
  ETSI: 7dbm (Max, limited by the
  regulation)
- **Received Dynamic range**
  >60dB

Integrated Antenna

- **Gain**
  23dbi
- **Type**
  Flat panel
- **Polarization**
  Linear (V or H)
- **Beam Width**
  9°

Optional External Antenna

- **Gain:**
  28dbi
- **Type**
  Flat panel
- **Polarization**
  Linear (V or H)
- **Beam Width**
  4.5°

General

- **Power Feeding**
  110/220 VAC
  50/60Hz; 48VDC
- **Power Consumption**
  25W max

LAN Interface

- **Type**
  10/100BaseT,
  Auto-negotiation
- **Framing/Coding**
  IEEE 802.3/U
- **Bridging**
  Self-learning up to 2000 MAC
  addresses
- **Traffic Handling**
  MAC layer bridging, self-learning
- **Data Latency**
  2msec typical
- **Line Impedance**
  100Ω
- **VLAN Support**
  Transparent
- **Connector**
  RJ-45

E1/T1 Interface

- **Framing**
  Unframed (Transparent)
- **Timing**
- Plesynchronous (Independent Tx and
  Rx timing)
- **Latency**
  8 msec
- **Line Impedance**
  120/100Ohm, balanced
- **Number of Ports**
  1,2,4
- **Connector**
  RJ-45
- **Jitter & Wander**
  G.823, G.824

Management

- **Protocol**
  SNMP based
- **Network Management**
  Based on SNMPC
- **Management Interface**
  Ethernet 10/100BT
  RS-232
- **Upgrade Capabilities**
  Local and over the air remote software
  download
- **Diagnostic**
  Local and Remote
  loopback testing
- **Mounting**
  Pole and Wall

Mechanics

- **ODU Dimensions (with Integrated
  Antenna)**

Height: 12 in
Width: 12 in
Depth: 2.3 in
Weight: 3.3 lb
- **IDU-E Dimensions**
Height: 1.7 in
Width: 9.3 in
Depth: 6.5 in
Weight: 1.1 lb

Environmental

- **Outdoor Unit Enclosure**
All-weather cases
- **ODU Temperatures**
-35 – 60°C
-31–140°F

- **IDU Temperatures**
-5 – 45°C
23 - 113°F

- **Humidity**
Up to 90%
Non-condensing

Standards

- **Radio**
FCC 47CFR Part 15, §15.247 and subpart C & E;
ESTI EN 301 893
- **Safety**
TUV 60950, according to UL 60950
CAN-CSA C22.2 No. 60950
- **EMC**
FCC 47CFR Part 15, §15.247 and subpart B
ETSI EN 300 386, EN 301 489-1
- **Environmental**
IEC 60721-3-4 Class 4M5
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