

SOLECTEK

# SkyWay™ Series

## SkyWay™ — Net —

Wireless Wide Area Networking

### SkyWay Series — A family of high speed/long distance solutions

Unlike any other bridge/router on the market today, the SkyWay family of products gives you the power to establish LAN-to-LAN connections over distances of up to 30 miles (48 Km) — with superior performance. Moreover, each SkyWay product is a compact, single, integrated unit designed to withstand harsh environments. No more indoor boxes and outdoor radio transmitters. SkyWay can be mounted up to 4000 feet (1200m) away from the LAN or right inside your building.

The high-speed data throughput of SkyWay products over long distances is unrivaled. This and other features now allow you to quickly enjoy savings by having to deploy far less equipment to cover your service area.

### Point-to-Point or Multi-Point Wide Area Networking

The SkyWay-Net product can be used anywhere high speed data transfer or internet access is required including business offices, educational campuses, healthcare facilities, manufacturing, retail and offshore plants.

The flexibility of SkyWay-Net allows configurations to be set for Point-to-Point or Multi-Point applications. Each SkyWay-Net unit can function as a base station (central site), a substation (remote site), or either end of a point-to-point link.

Service providers can also enjoy SkyWay-Net's flexible management of network resources to offer their customers superior services at less cost.

### Remote Operations

All management functions, monitoring, and software updates can be performed remotely from any desired location.

**Support** Solectek offers full turn-key networking solutions from project infancy to completion, as well as, on-site and on-line technical assistance programs.

**Notice:** We are already working on more exciting features that can be uploaded/downloaded remotely.



## PRODUCT FEATURES

- Up to 11 Mbps Wireless Data Rate (up to 64 Sub-Station)
- Links of Distances up to 30 Miles (48 Km)
- Single, ruggedized, mast-mounted unit (UL Outdoor rated)
- Optional Fiber Link for Extra Long Distances or EMI Protection
- Bridging and Static IP Routing
- SNMP Compliant
- Fiber and Copper Ethernet Options
- Remote Software Updates via TFTP, X-modem, or Y-modem
- FCC, Industrie Canada, and UL certified
- Milspec Connectors / Industrial Components for ultra-reliable service
- Supports AC or 48 DC Voltage

## Features and Interfaces

RF Modem Speeds:	11 Mbps, 5.5 Mbps and 2 Mbps (by menu selection.)
RF Protocol:	Solectek polling protocol for reliable links of any distance without RF "signal capture" or "hidden node" effects.
Wide Area Network Architectures:	Point-to-Point (one-to-one) and/or Multi-Point (one-to-many), 64 substations max, standard with all SkyWay models. Multiple systems may be co-located and run back-to-back to extend link distances and/or cover multiple sectors from the same mast.
Wireless Link Distance:	Up to 30 miles (48 Km) per pair with clear radio line of sight depending on antenna selection. All equipment (except antennas and cables) included with standard system. No additional amplifiers required.
Media Interfaces, Bridging, and Routing Protocols:	IEEE 802.3 Ethernet; IEEE 802.1D Spanning Tree, transparent MAC layer bridging, IP static routing.
LAN Operating System Compatibility:	Compatible with all major Ethernet LAN operating systems including Novell Netware, Microsoft NT, DEC Pathworks, Banyan Vines, LAN Manager, and UNIX Systems.
LAN Interfaces:	Ethernet: 10/100 Mbps twisted-pair (Option: 100 Mbps multi-mode fiber.)
Management Capabilities:	<ul style="list-style-type: none"> <li>• SNMP MIB II, Custom MIB in-band</li> <li>• TFTP in-band</li> <li>• RS-422, ANSI Console, X-modem, Y-modem</li> </ul>

## Radio Characteristics

Frequency:	2.4 to 2.4835 GHz
Radio Channels:	Center Frequency: from 2408 to 2468 MHz @ 6 MHz intervals – 11 channels
RF Coding:	Direct Sequence Spread Spectrum (DSSS)
Bit Error Rate (BER):	<ul style="list-style-type: none"> <li>• 11 Mbps – 1x10<sup>-8</sup> @ -83 dBm</li> <li>• 5.5 Mbps – 1x10<sup>-8</sup> @ -86 dBm</li> <li>• 2 Mbps – 1x10<sup>-8</sup> @ -90 dBm</li> </ul>
RF Security Codes:	128 variations available
Radio License Required:	No user license required. Certified for user installation and unlicensed operation per FCC 15.247 and FCC 15.203

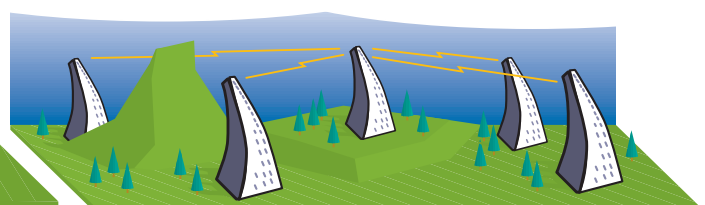
## Hardware

Chassis Type:	Single, sealed, mast-mounted unit. UL Outdoor certifications
Chassis Specifications:	8.5" W x 14" L x 3.5" H (.21m W x .35m L x .08m)
Chassis Environmental:	-30C to +70C
Power Supply:	Input: Autosensing 100-250 VAC / Output: +48 VDC
Power Consumption:	.5 amps @ 48 VDC
Certifications:	FCC Class A, UL Outdoor
SkyWay to Antenna Cable:	8 foot (2.4 m) chassis-to-antenna cable supplied.
SkyWay to Hub/Router Cable:	Standard cable available in lengths of 100 ft., 200 ft. and 300 ft. (30m, 60m and 90m)
Antennas:	Various types of FCC certified grid, flat panel, sectoral, and omni directional antennas are available from Solectek depending on wireless link distance and application requirements. Solectek has a broad catalog of FCC certified antennas (Option: ANT-PNL-17, ANT-PNL-22, ANT-PNL-16, ANT-SECT-12, ANT-OMNI-11, ANT-OMNI-6)
Options:	100 Base-FX fiber, or country-specific RF power levels (e.g. Europe, Korea, Japan.)



**Point-to-Point Configuration**

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**Multi-Point Configuration**

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