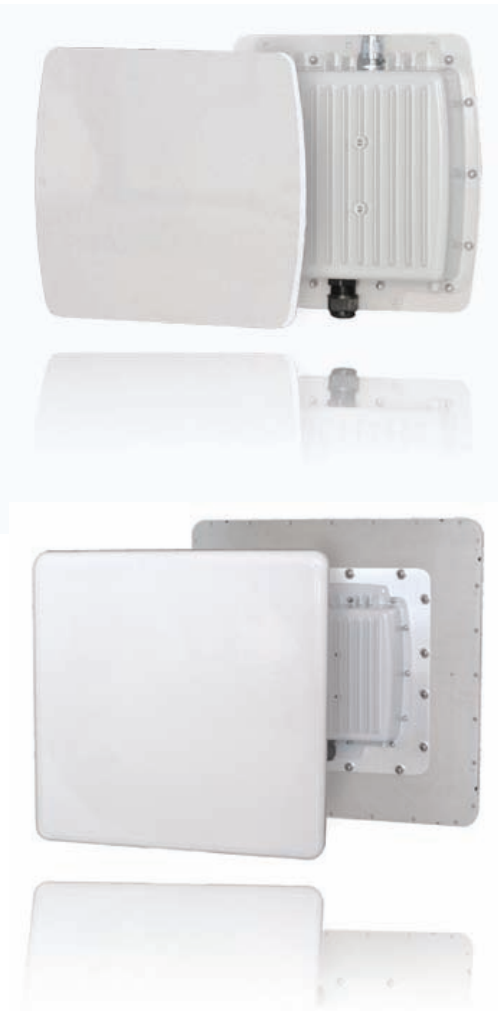


SKYWAY 7901 PTP KIT 5.8GHZ BROADBAND WIRELESS



[TOP] 7901-EXT
SEPARATE ANTENNA VERSION

[BOTTOM] 7901-INT
INTEGRATED ANTENNA VERSION
26 DBI

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TECHNOLOGY SUMMARY

Continuing Solectek's tradition in high throughput, long distance wireless networking, the SkyWay 7901 PTP Kit builds upon the successful SkyWay Series products with a new, higher performance 5.8GHz wireless system.

With data rates to **108 Mbps and up to 100 mW of RF power**, SkyWay 7901 delivers more capacity, farther than ever before. Such capability allows end-users to download large data files, high resolution images, video clips, and MP3 files within a matter of seconds. Streaming video and multiple VoIP connections can now be delivered or backhauled seamlessly.

Orthogonal Frequency Division Multiplexing (OFDM) technology delivers a wealth of benefits: high spectral efficiency supports class leading data rates while allowing multiple, nonoverlapping channels. OFDM is also capable of robust operation in **near or non-line-of-sight (NLOS)** link conditions, relaxing the stringent installation requirements associated with more traditional fixed wireless equipment.

Quality of Service (QoS) features within the SkyWay 7901 architecture allow tagged voice and video traffic to take priority over general data packet transfer, providing reliable, real-time capability even under congested link conditions. Priority privileges for marked frames are maintained from port to port: Ethernet through RF.

With **security** remaining a key consideration in many applications, the SkyWay 7901 delivers **128 bit AES encryption / decryption at full line speed**. The AES algorithm was selected to be the standard encryption method of the US Government by the National Institute of Standards and Technology (NIST)

Physically, the SkyWay 7901 Series is fully integrated. The network engine, digital baseband, and radio are all combined into a single, weatherized outdoor chassis, complete with **Power over Ethernet (PoE)** support. The antenna comes separately, connected with LMR cables (N-type connectors). Guaranteed operational from -30C to +60C, the product can be installed at any convenient outdoor location needing only inexpensive Ethernet CAT5 cable for connection to an indoor network switch. To further assist installation, an **integrated spectrum analyzer** and **audible antenna alignment function** are provided as standard features.

The SkyWay 7901 is truly an enterprise class system that comes complete with full function bridge/router software and extensive network protocol and network management support.

Combining a high power, 108 Mbps OFDM radio with a high performance, QoS based bridge/router engine, the SkyWay 7901 PTP Kit is a powerful, yet easy-to-use product for all of your point-to-point and multipoint broadband wireless needs.

SKYWAY 7901 PTP KIT SPECIFICATIONS

5.8GHZ BROADBAND WIRELESS

POINT TO POINT PERFORMANCE SkyWay 7901

Link Distance*	15 Miles
Radio Power*	100mW

RADIO

Data Rate*	108 Mbps, 72 Mbps, 54 Mbps, 36 Mbps, 18 Mbps, 12 Mbps, 9 Mbps, 6 Mbps
Modulation	OFDM - BPSK, QPSK, 16QAM, 64QAM
Media Access	Prioritized CSMA/CA
Frequency	5.725 - 5.875 GHz, country dependent
DC Power	+48Vdc / 0.8A, via Power-over-Ethernet, indoor DC injector (included)

NETWORKING

Ethernet	10/100Base-T, Auto-negotiating, Full/Half duplex, up to 100m separation between radio and network closet
QoS	Line speed packet inspection of 802.1p, IP ToS, IP DiffServ tags 4 queue prioritization engine RF MAC prioritization
Frame Aggregation	Dynamic, User enable/disable
Protocol Support	Transparent MAC layer bridging, IP Static Routing, RIP v1/v2 Transparent VLAN (802.1q)
Management	HTTP Web Server, FTP, VLAN, SNMP v1/v2 with trap support and custom MIB, custom Event Log, Integrated Spectrum Analyzer, Audible Tone Alignment Function
Security	
Encryption	Hardware accelerated, line speed 128-bit AES & 64, 128, 152-bit WEP
Authentication	MAC address-based access control
Channel Plan	Non-standard

MECHANICAL

Configuration	Integrated version (7901-INT) 26 dBi Integrated Antenna	Separate antenna version (7901-EXT) with N-type connector
Size	18" x 18" x 3.5"	13" x 13" x 2.5" (radio only)
Weight	14 lbs.	6 lbs. (radio only)
Pole Mount Adapter	2-Axis Adjustment, Accommodates 1-3" pole diameter	

ENVIRONMENTAL

Temperature	-30° to +60° C
Humidity	0-100% condensing
Water/Dust	Meets IP67 requirements
Lightning Suppression	Integrated, IEC 61000-4-5 Class 5 compliant
Wind	125 MPH survivability, 110 MPH operation
Wind Load @ 125 MPH	128 lbs.

REGULATORY

Radio Compliance	FCC CFR47, 15.247 Industrie Canada RSS 210 China MII [2002] 277 EU: EN 60950-1, EN 61000-3-2, EN 61000-3-3, EN 301 489-1, EN 301 893 Mexico NOM; Cofetel (pending)
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*Note: System performance and link distance for 36 Mbps/sec RF link rate setting. Throughput and link distance may be lower under NLOS conditions. Radio Power and data rate settings are subject to changes according to the country of installation.