



**XL 5825 — PTP Kit Integrated with 23 dBi antenna**



**XL 5827 — PTP Kit with Connectors for external antenna.**



**XL 5826— Connectorized PTP Kit Bundled with 29 dBi antenna and radome. kit shown here.**

## Applications

- Carrier / ISP Backhaul
- Video Surveillance Transport
- Lease Line Replacement
- Industrial Connectivity
- Metro / Core Backbone

## Feature Summary

- 2x2 MIMO OFDM Radio Technology
- 250 Mbps Actual Throughput for large bandwidth applications.
- High radio output power (400mW, 26 dBm) - extended coverage.
- Optimized for long distance connectivity
- Gigabit Ethernet Port
- Adaptive Coding and Modulation (ACM)
- Built-in Spectrum Analyzer
- Audio Tone Antenna Alignment Tool
- Wide Frequency range from 4.90 to 6.0 GHz.
- HyperARQ<sup>tm</sup> – Preserve system performance out to long distance

## Product Description

The Excel-250 PTP Series, Solectek's fourth-generation OFDM PTP product line in the 5GHz frequency band, represents a new class of last-mile connectivity solution for today's large bandwidth multimedia applications.

With the user throughput of 250 Mbps, the Excel 250 Series can serve a wide variety of bandwidth hungry applications, from transporting video traffic from a network of network video cameras to supporting enterprise connectivity.

The improved RF link performance allows more flexible deployments as well. The industry-leading 400mW high-output power radio extends the coverage area for a base station, while the advanced MIMO-based OFDM technology enhances near line-of-sight connections. Solectek's HyperARQ protocol is designed to preserve the data throughput even at long link distances.

Quality of Service (QoS) features within the SkyWay Excel 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.

For data security, the SkyWay XL250 system incorporates 128-bit AES hardware-based encryption at full line speed, without loss of data throughput. The AES algorithm was selected to be the standard encryption method by the US National Institute of Standards and Technology (NIST). In addition, the XL250 Series provides up to two levels of AAA protection through the configurable use of 802.1x/RADIUS and RF MAC authentication.

System	XL 5825	XL 5826
Operating Mode	TDD / Half-Duplex	
Throughput	250 Mbps	
Link Range (1)	Up to 10 Miles	Up to 20 Miles
<b>Radio</b>		
Frequency	5.35–5.85 GHz (2)	
RF Power	400mW Max	
RF Channel Size	20 and 40 MHz	
MIMO	2 x 2, 2 streams	
Modulation	OFDM – QAM64, QAM16, QPSK, BPSK	
Modulation Modes	Fixed or Adaptive Coding & Modulation (ACM)	
FEC	1/2, 2/3, 3/4	
Antenna	Integrated, 23dBi	Bundled, 29 dBi
<b>Networking</b>		
Ethernet	Gigabit Ethernet	
	Auto-negotiation, Full/Half Duplex, Max 100m separation between radio and shelter/closet.	
QoS	<ul style="list-style-type: none"> <li>Proprietary frame aggregation</li> <li>HyperARQ™ – intelligent packet correction</li> <li>Line speed packet inspection of 802.1p tags</li> <li>4 queue prioritization engine</li> </ul>	
Protocol Support	<ul style="list-style-type: none"> <li>Transparent MAC layer bridging</li> <li>Transparent VLAN (802.1q)</li> </ul>	
Management	<ul style="list-style-type: none"> <li>HTTP web server &amp; Telnet</li> <li>SNMP v1, v2c with private MIB</li> <li>NTP for server-based time support</li> <li>Filterable event log</li> </ul>	
Security	<ul style="list-style-type: none"> <li>Line speed 128bit AES encryption</li> <li>802.1x/RADIUS authentication</li> <li>MAC-based network access control</li> </ul>	

<b>Electrical</b>		
Voltage	48V DC, nominal	
Dissipation	10W (avg), 15W (peak)	
POE	Integrated POE/Power Supply	
<b>AC/DC Power</b>		
Voltage	100-240 VAC / 50-60 Hz	
Efficiency	> 85%	
AC Cord	3 prong, IEC 320 C13, country specific	
<b>Mechanical</b>		
	XL 5825	XL 5826
Dimensions	15" x 15" x 4" in (Radio + Ant)	9" x 9" x 4" in (Radio) 26" x 26" x 13" in (Antenna)
Weight	6.5 lb (3 kg)	5 lb (2.5 kg) 18 lb (8 kg)
Material	A380 Aluminum / ABS Plastic	
Finish	Powdercoat, Pantone 1C DuPont	
Network Ports	RJ45 via environmental seal, included	
Antenna Ports	None	2 N-type Connectors
<b>Mounting Kits</b>		
Dimensions	6.5" x 3.0" in	
Deg. Freedom	3 deg (elevation, azimuth, rotation)	
Adjust Range	Elevation: +/- 75 degrees Azimuth: +/- 90 degrees Polarization: 360 degrees	
Mast Mount	Mast Diameter: 0.75 to 3 inches	
Wall Mount	4 x clamps through holes	
<b>Environmental</b>		
Temperature	- 40 to 65 C	
Humidity	5-95%, condensing	
Protection	NEMA4 / IP67	
<b>Regulatory</b>		
FCC / IC	CFR47, Part 15, RSS-120	
EU	CE Mark	

Notes: 1. based on 20 MHz, QAM16-1/2, 2 stream. RF dependent.  
2. Country specific, depends on local regulations.