



- Key Benefits**
- Cost-effective CPE focuses on keeping capital and operational expenses down
  - Auto discovery and provisioning – just point the SkyConnector towards the mesh network to get it configured
  - Wireless connectivity via long-range (up to 7.5 miles/12km) links to mesh network
  - Non-line of sight (NLOS) capabilities achieved through OFDM modulation (multipath), high-power transmissions (boring through trees), and routing around obstacles (via mesh)

### SkyConnector – Indoor and Outdoor CPE

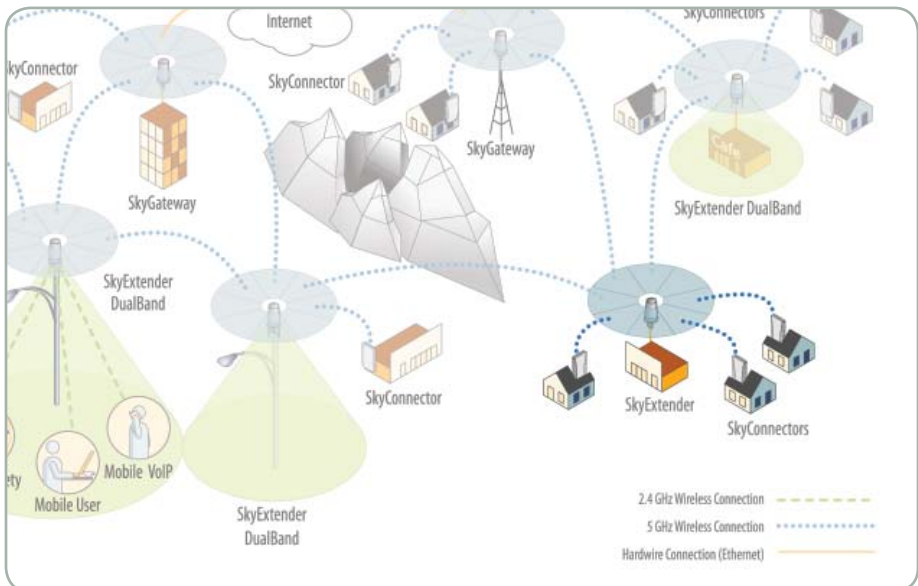
One of the key success factors for service providers deploying broadband wireless is cost effectiveness. The wireless network has to be capable of providing an economical means of building an infrastructure as well as a profitable method of deploying subscriber access devices. SkyPilot’s SkyGateway™ and SkyExtender™ provide a cost-effective way to build a world-class infrastructure and the SkyConnector™ enables service providers to focus on profitable subscriber access.

The SkyConnectors were designed to keep both capital expenditures and operating costs in check when deploying broadband wireless access (BWA) services to a broad base of subscribers. Like their DSL and cable modem counterparts, the SkyConnectors are cost-effective indoor and outdoor CPE that can be used for either business or residential access but without requiring copper or coaxial connections. The SkyConnectors provide an Ethernet drop to the subscriber and connect to the high-capacity wireless mesh network through a directional 5 GHz link. In addition to keeping per-unit costs down, the SkyConnectors also make efficient use of the wireless mesh infrastructure through long-range (up to 7.5 miles/12 km) and non-line of sight (NLOS) connectivity. To combat ongoing operational expenses, the SkyConnectors are easy to deploy with audible and visual feedback of signal strength to ensure proper installation and are provisioned through the centrally-management SkyProvision™ application.

Not only do the SkyConnectors keep costs down but they also provide a range of advanced, revenue-enhancing services. The units integrate per-user rate control to allow for different service tiers (i.e. 1 Mbps, 2 Mbps, etc.) as well as providing VLAN support for transparent LAN services and quality of service parameters for latency-sensitive applications such as VoIP and video surveillance.

The indoor and outdoor units are available in a choice of frequency bands to meet the variety of specifications for international deployments. The frequency bands include 4.940-5.150, 5.150-5.450, 5.450-5.725, and 5.725-5.850 GHz and selection of the frequency band is made at the time of ordering.

### Deploy cost-effective fixed wireless solutions with the SkyConnector CPE



# SkyConnector System Specifications

## Traffic Management

- VLAN support: IEEE 802.1q
- Traffic Prioritization: IEEE 802.1p, protocol type, IP port, IP ToS field, and IP address list
- Traffic Filtering: protocol type, IP port, and IP address list
- Traffic Shaping: upstream and downstream per-user rate control

## Configuration, Management, & Monitoring

- NMS integration: SNMPv2c
- EMS: SkyProvision and SkyControl
- IP address: DHCP or static
- Firmware: Multiple versions stored in nonvolatile memory; updated over the air via FTP
- Provisioning: Manual or automated
- Configuration file: XML over HTTP
- MIB support: MIB-II (RFC 1213); Ether-Like (RFC 2665); Bridge (RFC 1493); SkyPilot private MIB
- Remote management: CLI via Telnet, SNMPv2c

## Wireless

<b>Frequency band</b>	4.940-5.150, 5.150-5.450, 5.450-5.725, or 5.725-5.850 GHz
<b>EIRP</b>	42.5 dBm/17.8 W peak, 36 dBm/4 W average, 33 dBm/2 W average, 30 dBm/1 W average, or 36 dBm /4 W peak (EIRP selected for country-specific regulations)
<b>Media access</b>	Time Division Duplex (TDD)
<b>Modulation technique</b>	OFDM with adaptive modulation
<b>Modulation rates</b>	6 to 54 Mbps
<b>Throughput</b>	Up to 20 Mbps
<b>Latency</b>	8-10 ms roundtrip per hop
<b>Antenna</b>	28° horizontal x 9° vertical panel, 17 dBi
<b>Channel width</b>	5, 10, 20 MHz
<b>Channel resolution</b>	5 MHz frequency control
<b>Receive sensitivity</b>	-90 dBm at 6 Mbps modulation
<b>Connectivity</b>	Connects with SkyGateways, SkyExtenders, and SkyExtender DualBands
<b>Authentication</b>	MD5-based certificates
<b>Encryption</b>	128-bit AES on wireless link

## Product Specifications

	SkyConnector Outdoor	SkyConnector Indoor
<b>Connector</b>	RJ-45 (Power over Ethernet)	
<b>Mounting</b>	Eave, roof, or chimney	Window or desktop
<b>Range</b>	Up to 7.5 miles/12 km to wireless mesh network	
<b>LEDs</b>	Power, signal strength, wireless link, Ethernet activity, Ethernet link	
<b>Dimensions</b>	12.6" (32 cm) H x 6.6" (16.8 cm) W x 4.2" (10.7 cm) D	11.0" (27.9 cm) H x 5.6" (14.2 cm) W x 2.0" (5.1 cm) D
<b>Weight</b>	3.8 pounds (1.7 kg)	1.5 pounds (0.7 kg)
<b>Operating temperature</b>	-40° to 131° F (-40° to 55° C)	32° to 131° F (0° to 55° C)
<b>Wind loading</b>	Up to 150 mph (240 km/h)	n/a
<b>Enclosure/humidity</b>	NEMA-4X	10-90% non-condensing
<b>Power</b>	110-230 VAC, 50-60 Hz input; 8 Watts	
<b>Certifications</b>	FCC Part 15, FCC 47 CFR Part 15, Class B USA; compliance with UL safety standards, CE, C-Tick, IC RSS210 Issue 5	
<b>EMI and susceptibility</b>	FCC Part 15.107 and 15.109	
<b>Warranty</b>	One-year limited warranty on hardware; 90-day limited warranty on software	



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