



Wireless without Boundaries

## Kymalite Series

KSP49-1049-XX / KSP50-1050-XX



**Small and Compact**  
**4.9/5XGHz OFDM Outdoor Subscriber**  
5 / 10 / 20 / 40MHz Fractional Bandwidths

49/5X  
GHz

L/UL

100+  
Mbps

OFDM

FE

PTP/  
PMP

ODU

### Features & Benefits

- Competitive P-T-P or P-T-MP Bridge
- Monitoring of remote systems
- Cost effective alternative to wired network environment

### Applications

- Redundant link between buildings
- Home automation & building control
- Wireless Repeater
- Dedicated ISP connections for high-reliability subscribers

The KSP49/KSP5X-1050-XX is designed for Carrier and Internet Service Providers to address the last-mile wireless infrastructure solution with high performance and competitive cost. It is compliant to IEEE802.11a standard; it comes with software controllable RF power output and distant setting for optimal distant (up to 8km) Vs throughput performance.

The compact outdoor casing complies with IP68 standard and is water and dust resistant. Integrated with a 12dBi directional antenna, and data rate of up to 108Mbps on Turbo mode, the KSP49/KSP5X-1050-XX series has been tested to deliver a high TCP throughput of up to 20Mbps. With an option to have the WDS (wireless distribution system) turning on or off, it is interoperable with most of the standard 802.11 a/b/g APs in the market. It can also support multiple users with the WDS turned off.

Data encryption such as WEP, WPA-PSK and WPA/2 is possible providing the necessary security and interoperability with other equipment. Enhanced access control can be done with the use of MAC address filtering, both on the AP and the client side. Additionally, it is firmware upgradeable through web-server and Telnet.

### Product Highlights

#### Effective spectrum utility

The KSP49/KSP5X-1050-XX uses advanced technology to narrow the channel into smaller bandwidths more than other wireless radios. There are software selectable channel bandwidths of 5, 10, 20 and 40MHz.

#### Turbo mode increases the performance up to 50%

Turbo mode supports up to 108Mbps data rate which can enhance the throughput performance of the radio up to 50%.

#### Bandwidth control / QOS

Bandwidth control can limit the throughput of the KSP1050-32, and the QOS function provides better Video/VOIP signal quality.

#### Security

WEP 64 / 128 / 152 bits, 802.1x Authentication (EAP), MAC access control, disable broadcast the SSID, client isolation, WPA-PSK, WPA-TKIP encryption and WPA2 (AES-128bits) build the highest security mechanism to prevent malicious attacks from the internet.

#### Antenna Adjust

This function provides MAC address to the RSSI (signal strength) info of the units which is associated to the other end of the link for specific link quality information.

# Specifications

RADIO		
Operating Channels	4.9 GHz (optional)	4.900GHz – 5.250 GHz
	5X GHz	5.150GHz - 5.350GHz
		5.475GHz - 5.725GHz
		5.725GHz - 5.850GHz
Channel Bandwidth	Software selectable channel bandwidths of 5 / 10 / 20 / 40 MHz	
Output Power	18 dBm (±2dB) @ QAM-64 19 dBm (±2dB) @ QAM-16 20 dBm (±2dB) @ QPSK 20 dBm (±2dB) @ BPSK	
Receive Sensitivity (BER 1E10-6) In a 5MHz channel	-71 dBm (±2dB) @ QAM-64 -81 dBm (±2dB) @ QAM-16 -84 dBm (±2dB) @ QPSK -89 dBm (±2dB) @ BPSK	
Frequency Stability	±10 ppm	
Modulation	OFDM	
Range	Up to 8 Km.	
INTERFACES		
Ethernet	IEEE 802.3(10Base-T) / IEEE 802.3u(100Base-Tx)	
MANAGEABILITY		
Management and setup	Web-based	
SNMP agents	V1, V2c	
Password Access control to configuration	2 levels	
Operating System	Windows 98/2000/NT/XP	
Network Architecture	PTP / PTMP	
Bandwidth management	Yes	
Other features	VLAN transparent	
SECURITY		
Data Encryption	64/128/152 bits encryption; WPA-PSK, WPA2 (AES-128 bit)	
Authentication	802.1x Auth.(EAP)	
Authorization	MAC Address Access and protocol Filter	
Other security	Disable broadcast SSID(suppress SSID); Wireless Isolation	
ANTENNA		
Frequency	4.9 GHz or 5X GHz Band	
Gain	12dBi	
Beamwidth	H 40° ; E 33°	
VSWR	≤ 2.0:1	
Front to back ratio	40 dB	
Impedance	50 ohms	
ENVIRONMENT		
Operating Temperature	-40°C ~ 55°C	
Storage Temperature	-40°C ~ 70°C	
Humidity	95% non-condensing	
POWER SUPPLY		
AC 100-264 V, DC 24 V, 50-60Hz		
PHYSICAL		
Dimension	215 (L) ×122 (W) × 65 (H)	
Weight	750g; 1.65lb	
WARRANTY		
1 year		
ADVANCE		
Base Station Scanning	RSSI	
Watchdog		
ORDERING INFORMATION		
KSP49/KSP5X-2050-EXT	4.9/5GHz, output power=20dBm, compact Outdoor OFDM Subscriber; Ext antenna; DC24V	
KSP49/KSP5X-1050-I12	4.9/5GHz, EIRP=32dBm, Outdoor OFDM Subscriber with 12dBi panel antenna; DC24V	
KSP49/KSP5X-1050-I23 (optional)	4.9/5GHz, EIRP=43dBm, Outdoor OFDM Subscriber with 23dBi panel antenna; DC24V	

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Specifications and availability are subject to change without notice.

Performance specifications are for optimum conditions and may be affected by location, environment, and other operating conditions.  
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