



Product Description

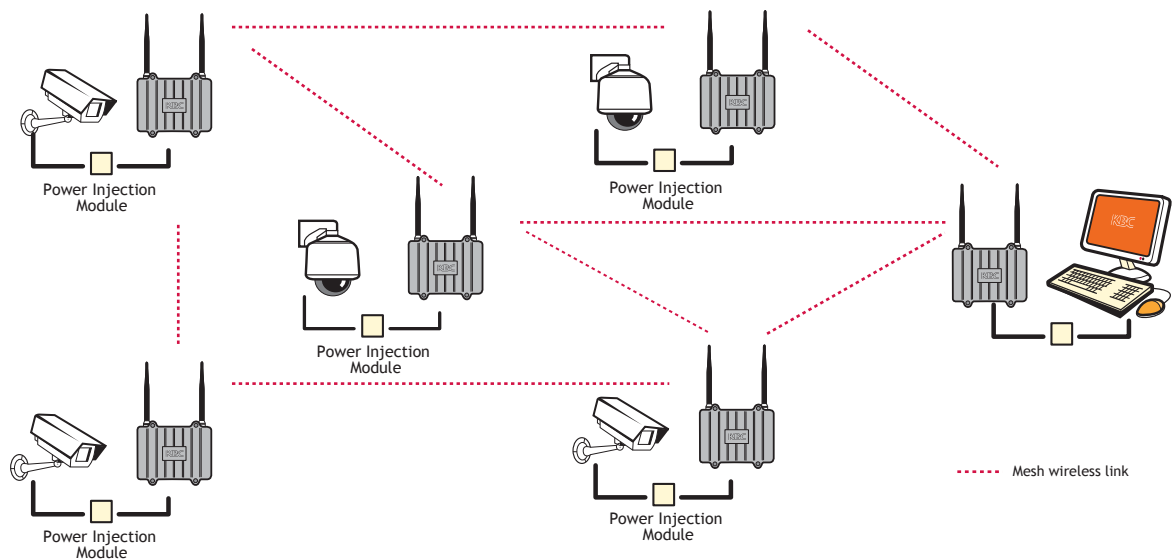
The MiniLink Wireless Mesh is a dual radio mesh networking product that supports the transmission a 10/100 Ethernet signal. Each node operates in the license free 2.4 and 5 GHz bands and operates at data rates up to 54 Mbps. Redundant Mesh networks can be established by connecting multiple nodes to one another in order to enable a variety of IP devices such as IP cameras, video servers, NVR/DVRs, etc. for maximum reliability and flexibility. The system is designed to route Ethernet traffic along the strongest connected path ensuring the best possible throughput and system performance. A secure encryption method is used to prevent unauthorized access to the system. Multiple nodes can be configured as a stand-alone system or as part of a larger wired network.

Product Features

- Dual or single radio nodes available
- 802.11g/a user selectable; frequency modulation DSSS/OFDM
- Layer 3 routing; supports all TCP/IP protocols
- Compact billet aluminium NEMA-67 rated casing
- Secure Encrypted Transmission
- Web browser interface for advance operation
- Non-line of sight capabilities (900 MHz - where available)



Typical System Configuration



Specifications

Radio Specification

Transmitting Frequency	2.400 - 2.483 GHz, 5.15 - 5.35 GHz, 5.725 - 5.825 GHz
US	902 - 928 MHz
Europe	2.400 - 2.483 GHz, 5.15 - 5.35 GHz, 5.47 - 5.725 GHz
Japan	2.400 - 2.483 GHz, 4.90 - 5.091 GHz, 5.15 - 5.25 GHz
China	2.400 - 2.483 GHz, 5.725 - 5.85 GHz

Channel Capacity 802.11b/g including 900 MHz option for US / Canada

US/Canada	11 (1 - 11)
Major European Countries	13 (1 - 13)
France	4 (10 - 13)
Japan	11b: 14 (1 - 13 or 14th), 11g: 13 (1 - 13)
China	13 (1 - 13)

Non-overlapping Channels 802.11a

US/Canada - 12	(5.15 - 5.35 GHz, 5.725 - 5.825 GHz)
Europe - 19	(5.15 - 5.35 GHz, 5.47 - 5.725 GHz)
Japan - 4	(5.15 - 5.25 GHz)
China - 5	(5.725 - 5.85 GHz)

Modulation

802.11b/g	DSSS (DBPSK, DQPSK, CCK) /OFDM (BPSK, QPSK, 16-QAM, 64-QAM)
802.11a	OFDM (BPSK, QPSK, 16-QAM, 64-QAM)

Data Modulation Rate

802.11b/g	11, 5.5, 2, 1Mbps, auto-fallback, up to 54Mbps;
802.11g	super mode up to 108Mbps
802.11a	(Normal):54 / 48 / 36 / 24 / 18 / 12 / 9 / 6Mbps, auto-fallback
802.11a:	(Turbo):108 / 96 / 72 / 48 / 36 / 24 / 18 / 12Mbps, auto-fallback
900MHz:	20 - 30Mbps standard, up to 54Mbps

TX Power

802.11b:	18dBm
802.11g:	18dBm @ 6Mbps, 15dBm @ 54Mbps
802.11a:	17dBm @ 6Mbps, 13dBm @ 54Mbps
900MHz:	28dBm @ 1-24Mbps, 23dBm @ 54Mbps

Receiver Sensitivity

802.11a:	-88dB @ 6Mbps, -87dB @ 9Mbps, -85dB @ 12Mbps, -83dB @ 18Mbps, -80dB @ 24Mbps, -75dB @ 36Mbps, -73dB @ 48Mbps, -71dB @ 54Mbps
802.11b:	-95dB @ 1Mbps, -94dB @ 2Mbps, -92dB @ 5.5Mbps, -90dB @ 11Mbps
802.11g:	-90dB @ 6Mbps, -89dB @ 9Mbps, -87dB @ 12Mbps, -85dB @ 18Mbps, -82dB @ 24Mbps, -79dB @ 54Mbps
900MHz:	-90dB @ 6Mbps, -89dB @ 9Mbps, -87dB @ 12Mbps, -85dB @ 18Mbps, -82dB @ 24Mbps, -70dB @ 54Mbps

Antenna Connectors

2x N-Type Female
(dual radio nodes)

Network Management

Interface:	Web GUI
Protocols Used:	All TCP/IP
Multicast Support:	Yes
Quality of Service:	802.11e (WME), ToS, QoS

Security

Routing, VPN, MAC address filtering, Encryption Support (802.1x, AES-CCM, TKIP, WEP, WPA, WPA2)

Mechanical

Physical Dimensions	7.125"H x 8.375"W x 2.188"D
Weight	1.45Kg (3.2 lbs)
Environmental	IP-67
Enclosure Material	Die-Cast Aluminum
Mounting Hardware	Pole Bracket and U-bolts

Power

Power Requirements:	7 VDC - 20 VDC
Power Method:	Power-over-Ethernet (PoE) module
Cable Specifications:	100 Meters (328 Feet) CAT-5 cable

Environmental

Operating Temperature:	-40° ~ +80° C (-40° ~ +180° F)
Humidity:	95% non-condensing

Approvals

FCC	NKRDCA82; SWX-XR9
IC	7286-S4X0082; 4441A-DCMA82
CE	TBD

Power Injection Module Specifications

Mechanical

Physical Dimensions	Plastic housing, not weatherproof 26mm x 54mm x 41mm (1.0" x 2.125" x 1.625")
Weight	31g (1.1 oz)
Interface	2 - RJ45 connectors

Power

Power Supply	100 - 240 VAC, 50/60 Hz, 30 W input 12 VDC 1.0A output UL and cUL listed PSU
Power-over-Ethernet (PoE)	PoE "mid-span" compliant (pins 4,5 positive - pins 7,8 ground)
Indicator	LED - green
Connectors	DC Jack 2.5mm x 5.5mm center positive, 2 - RJ45

Environmental

Humidity	Not weatherproof, PIM unit must be enclosed
Operating Temperature	-29° ~ +66° C (-20° ~ +150° F)

Part Number Configurator

MESH-AA-OA

A: 2.4/5 GHz Primary Card
B: 900MHz Primary Card

A: 2.4/5 GHz Secondary Card
C: 4.9GHz Secondary Card
Blank: No Secondary Card

O: Outdoor Case

A: US Power Connection
B: UK Power Connection
C: Euro Power Connection
E: Australian Power Connection

Due to ongoing technological improvements, product specifications are subject to change without notice.