

WCM-2

**StrongMesh™
Wireless Coordinator Module**

Push Button Set Up

For Use with Net/X™ Network Controllers



Works with all XBus™ Controllers, including the NT-SSAx/CLK and NT-IPXB Network Controllers

GENERAL DESCRIPTION:

The WCM-2 Wireless Coordinator Module is second generation of the Net/X™ StrongMesh™ wireless coordinator and is the heart of the Net/X™ wireless communications system. Based on state of the art wireless mesh network technology, the coordinator handles all wireless communications with the WBM series of back plates, allowing seamless communications with Net/X™ thermostats without pulling any communications cable. The integrated RF transceiver offers unmatched performance in a 2.4GHz IEEE 802.15.4 module. With a tested outdoor *line-of-site* range of over 3,000 feet from the WCM-2 to a StrongMesh™ thermostat backplate before 'hopping', the module supplies the power and reliability needed for practically any building. And because the WCM-2 coordinates the mesh (or hops) between the other modules in the network, each thermostat's RF transceiver acts as a repeater, allowing networks of virtually any size and range.

Works for both new construction and hard to reach retrofit applications.



STANDARD FEATURES:

- Connect to any Net/X™ Network Controller* via the XBUS communications port
- Can be placed up to 1000 feet away from the Network Controller with a single CAT5 cable
- Can be combined with 'wired' Net/X™ thermostats on the same system
- Usable wireless range of up to 1,000 feet, depending on building structure
- Up to a maximum of four (4) WCM-2 can be connected to a Network Controller
- Up to a maximum of two (2) WCM-2 can be connected to a single XBUS Drive
- Coordinates up to 32 wireless thermostats
- Virtually unlimited system size with up to 16 Channels and 99 networks per channel
- Peacefully coexists with other 2.4GHz wireless communications products, including Wi-Fi
- Simple pushbutton configuration
- LED Display for Network ID, Channel ID and System Configuration and Status
- Coaxial long range antenna included
- IEEE 802.15.4 mesh network compliant
- 2.4GHz spread spectrum technology
- FCC Certified on all 16 channels
- FCC Part 15.247 Class B agency approval; Industry Canada (IC) approval

* Note – NT-SSAx/CLK Network Controller is a legacy device no longer manufactured, but will work with the WCM-2.

SPECIFICATIONS:

Rated Voltage:	16-24VAC. Use NT-PWR16 or NT-PWR24 UL Listed Power Supply <i>Recommended Wiring Shown Below</i>
Rated RF Power:	18dBm
Line of Sight Range:	3,000 feet
Indoor Range:	up to 1,000 feet; dependent on building construction
Frequency Range:	2.4GHz, spread spectrum
Antenna Type:	Coaxial ¼-wave
Certifications:	FCC and IC
Dimensions:	6.5" H x 6.0" W x 1.6" L
Operating Temperature:	0°C to 60°C (32°F to 140°F)
System LEDs:	Red – XBus; Green – Power
Communications Terminations:	XBus – X1 and X2
Power Terminations:	16-24VAC, VAC(common)

WIRING DIAGRAMS:

Typical Wiring Diagram

NT-IPXB Network Controller

