



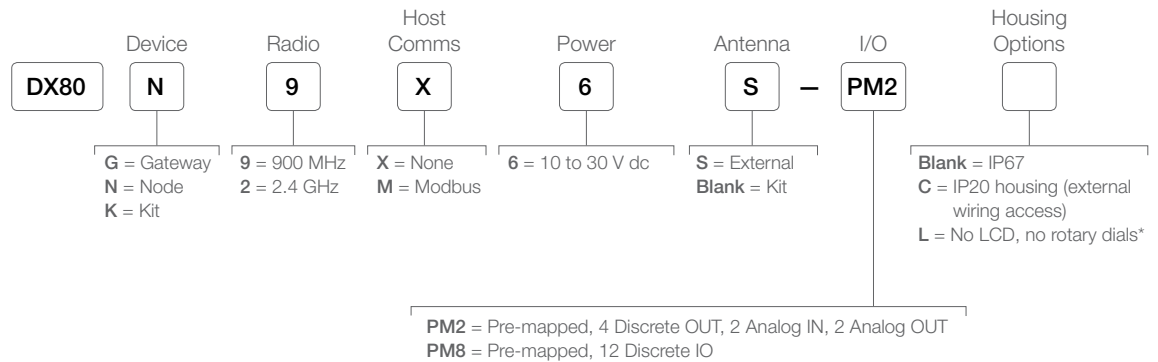
Sure Cross® PM Series

An I/O Radio network that combines long range line-of-sight coverage with ease of deployment and use.

Banner's PM Series provides a flexible network that easily sets up without software. Setting up a basic point-to-point network is as easy as pairing a cell phone to a headset. You can replace cables and extend the range of digital and analog signals with minimum effort.

Key Features:

- Menu-driven LCD user interface
- No software needed
- IP67-rated housing for demanding environments
- One Gateway is preconfigured to support up to six Nodes
- Choose from two I/O configurations
- Select from multiple I/O maps



* Available on PM8 models only

Sure Cross® PM Kit



Simple wire replacement is even simpler with Banner's fully integrated kit.

Plug-and-play with one Gateway and one Node, pre-bound and mapped to solve your first wireless challenge, and provide the start of a flexible network that can be expanded as production needs change.

Key Features:

- Pre-bound and mapped expandable bi-directional radios
- Eight LCD menu selectable I/O mapping options
- IP67-rated housing for demanding environments
- One Gateway is preconfigured to support up to six Nodes

PM2 and PM8 Gateways and Nodes Specifications

Radio Range	900 MHz (1 W): Up to 9.6 kilometers (6 miles)* 2.4 GHz (65 mW): Up to 3.2 kilometers (2 miles)* *Line of sight with included 2 dB antenna		
Minimum Separation Distance	900 MHz (1 W): 4.57 m (15 ft)		2.4 GHz (65 mW): 0.3 m (1 ft)
Transmit Power	900 MHz (1 Watt): 30 dBm (1 W) conducted (up to 36 dBm EIRP)		2.4 GHz: 18 dBm (65 mW) conducted, less than or equal to 20 dBm (100 mW) EIRP
900 MHz Compliance	FCC ID UE3RM1809: This device complies with FCC Part 15, Subpart C, 15.247 IC: 7044A-RM1809		
2.4 GHz Compliance	FCC ID UE300DX80-2400 - This device complies with FCC Part 15, Subpart C, 15.247 ETSI/EN: In accordance with EN 300 328: V1.8.1 (2012-06) IC: 7044A-DX8024		
Spread Spectrum Technology	FHSS (Frequency Hopping Spread Spectrum)		
Linked Timeout	Gateway: Configurable via User Configuration Tool (UCT) software		Node: Defined by Gateway
Communication Hardware (RS-485) - Gateways Only	Interface: 2-wire half duplex RS-485 Baud rates: 9.6k, 19.2k (default), or 38.4k Data format: 8 data bits, no parity, 1 stop bit NOTE: Battery life is reduced to 1 year when the sample/report rate is increased to 16 seconds		
Communication Protocol	Modbus RTU		
Supply Voltage	10 to 30 V dc (Outside the USA: 12 to 24 V dc, ±10%) 900 MHz Consumption: Maximum current draw is < 100 mA and typical current draw is < 50 mA at 24 V dc (2.4 GHz consumption is less)		
Construction	Polycarbonate housing and rotary dial cover; polyester labels; EDPM rubber cover gasket; nitrile rubber, non-sulphur cured button covers Weight: 0.26 kg (0.57 lbs) Mounting: #10 or M5 (SS M5 hardware included) Max. Tightening Torque: 0.56 N·m (5 lbf·in)		
Antenna Connection	Ext. Reverse Polarity SMA, 50 Ohms Max Tightening Torque: 0.45 N·m (4 lbf·in)		
Interface	Indicators: Two bi-color LEDs	Buttons: Two	Display: Six character LCD
Wiring Access	Two 1/2-in NPT ports		
Environmental Rating	PM2 and PM8 Models: IEC IP67; NEMA 6		PM2C and PM8C Models: IP20; NEMA 1
Operating Conditions	Temperature: −40 °C to +85 °C (−40 °F to +185 °F) (Electronics); −20 °C to +80 °C (−4 °F to +176 °F) (LCD) Humidity: 95% max. relative (non-condensing) Radiated Immunity: 10 V/m, 80-2700 MHz (EN61000-4-3)		
Shock and Vibration	IEC 68-2-6 and IEC 68-2-27 Shock: 30g, 11 millisecond half sine wave, 18 shocks Vibration: 0.5 mm p-p, 10 to 60 Hz		

Certifications

