# SureCross® MultiHop Ethernet Data Radio



## An Industrial Ethernet Radio that combines long distance coverage with ease of use

#### 2 Models Available

- DX80ER9M-H 900 MHz (1 Watt) with a 9.6 kilometer (6 mile) range
- DX80ER2M-H 2.4 GHz (65 mW) with a 3.2 kilometer (2 mile) range

#### **Flexibility**

- · Each model can be selected to be a Master, Slave or a Repeater
- 10 to 30V dc or a low power 5V dc mode for Solar Power applications

#### Ease of Use

- · No software or IP addressing required for deployment
- · Built in LCD interface for Radio Strength diagnostics



### Simple Cable Replacement

#### **Applications**

- Ethernet Wire Extension and Replacement
- Remote I/O
- Message Display Signs
- SCADA (PLCs, Modbus, Ethernet IP)
- AGV Integration
- Electric, Oil & Gas Utilities/Metering

#### **Easy to Deploy**

- 1. Bind radios
- 2. Check signal strength
- 3. Plug in Ethernet cables

No IP addressing required

Just follow the SureCross Wireless Quick Start Guide (P/N 170872)



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#### Radio

Radio Range	900 MHz (1 Watt): Up to 9.6 kilometers (6 miles) * 2.4 GHz (63.5 mW/100mW EIRP): Up to 3.2 kilometers (2 miles) *
900 MHz Compliance (1 Watt Radios)	ISM Band The Americas
2.4 GHz Compliance	ISM Band World Wide
Spread Spectrum Technology	FHSS (Frequency Hopping Spread Spectrum)
Radio Network Topologies	Point to Point, Star, Point to Point with Repeaters and Tree
Raw Bit Rate:	200 kbps to 300 kbps

<sup>\*</sup> Line of sight with included 2 dB antenna. High-gain antennas available for increased range and noise immunity

#### General

Power	+10 to 30V dc 3.6 to 5.5V dc for low power applications External terminal header connection
Housing	Polycarbonate
Antenna Connection	Reverse Polarity SMA
Hardware Interface*	Two bi-color indicators LEDs Six character LCD display Two push buttons One six position DIP switch
Software Interface*	Web Tool via Web Browser

<sup>\*</sup> The Hardware or Software Interface can be used for Setup and Diagnostic functions

#### Communications

Ethernet	10/100 baseT RJ45 connection <b>Encyrption:</b> AES (Advanced Encryption Standard) using a 256-bit cryptographic key
Serial	RS232: RX, TX, CTS, RTS RS485: 2 wire (Half Duplex) Baud Rate: 1,200 bps to 230,400 bps (Adjustable)

#### **Environmental**

Rating	IEC IP20; NEMA 1
Conditions	Operating Temperature: -40 to +85° C
	Operating Humidity: 95% max. relative (non-condensing)
	Radiated Immunity: 10V/m, 80-2700 MHz
Shock and Vibration	Shock: 30 g
	Vibration: 10 to 60 Hz

#### **Radio Network Topologies**







