# Sure Cross® RS-485 to USB Adapter Cable



#### Datasheet



Figure 1. BWA-UCT-900 and MQDMC-401

- Connects a Sure Cross Gateway, a MultiHop Radio, or an RS-485 sensor to a Windows PC USB port
- BWA-HW-006 supplies power to one Gateway, one MultiHop Radio operating at 250 mW, or one RS-485 sensor
- BWA-UCT-900 supplies power for one Gateway or one MultiHop Radio operating at 1 Watt
- Supports baud rates of 9600, 19200, and 38400
- Converts USB to RS-485 (2-wire) with a Euro-style connector
- Supports Windows XP and Vista
- Download the User Configuration Tool, MultiHop Configuration Tool, or Sensor Configuration Tool software free from Banner Engineering's Wireless I/O Products website
- Includes cordset MQDMC-401 for use with the DX80...C models

Do not use BWA-HW-006 to connect a Performance Gateway or MultiHop Radio operating in 1 Watt mode. Always configure the Performance and MultiHop models to operate in 250 mW mode before connecting them to your computer to avoid damaging your USB port.

To supply power to 1 Watt radios during configuration, use cable BWA-UCT-900.

When plugging this cable into your computer for the first time, give the cable 1 to 2 minutes to check your computer for the proper driver, download the driver, then install it. Plug the cable into your Gateway; the cable should supply enough power to the Gateway to configure it.

For additional information, updated documentation, and accessories, refer to Banner Engineering's website, www.bannerengineering.com/surecross.

Models	Adapter	Length	
BWA-HW-006	RS-485 to USB	1 meter	
BWA-UCT-900	RS-485 to USB, with wall plug to power 1 Watt radios during configuration		

Both cordsets include cordset model MQDMC-401 for use with the DX80...C models.

# 4-pin M12/Euro-style Female Connection

	Pin	Wire Color	DX80 Wiring	DX80C Wiring
	1	Brown	10 to 30 V dc	V+
1-50-2	2	White	RS-485 Tx +	Tx
1000	3	Blue	dc common (GND)	V-
4-3	4	Black	RS-485 Rx –	Rx
	Conn	ecting dc power to t	he communication pins will cause p	permanent damage.



### Specifications

Input Power

BWA-HW-006: 5 V dc from USB port

BWA-UCT-900: 5 V dc from USB port; 100 to 240 V ac from the plug-in wall transformer

Output Power

BWA-HW-006: 10 V dc power output for a single device transmitting at

250 mW or less

BWA-UCT-900: 24 V dc power output for a single device transmitting at

1 Watt

**Operating Parameters** 

Temperature: -40 °C to +80 °C (-40 °F to +176 °F)

Humidity: Up to 95% non-condensing

**USB** 

Connector: USB type A plug

Standard: 2.0

RS-485

2-wire; 9.6k, 19.2k, or 38.4k; 8 data bits; 1 stop bit; no parity Connector: M12/Euro-style connector compatible with Banner wireless

Gateways and data radios

Banner Compatible Devices

DX80G\*, DR9M, DR2M models

M12FTH3Q Temperature and Humidity Sensor; M12FT3Q Temperature

Sensor; GPS50M GPS Sensor

BWA-HW-006 will not power a MultiHop radio in 1 Watt mode. Use BWA-UCT-900 to supply power to 1 Watt radios. To use BWA-HW-006

with a MultiHop radio, set the radio to operate at 250 mW.

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1 meter (This cable can be extended up to 30 meters.)

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