Cables Used with Sure Cross® Wireless Products

more sensors, more solutions

There are several special cables that can be used with the Sure Cross® Wireless product line.

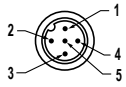
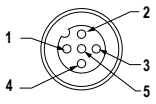
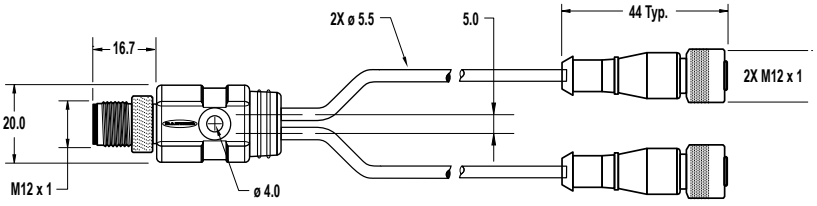
Splitter Cables

The 4-pin, 5-pin, and DB9 splitter cables all have specific functions. Using the incorrect cable for your application can damage the radios.

5-pin Splitter Cables

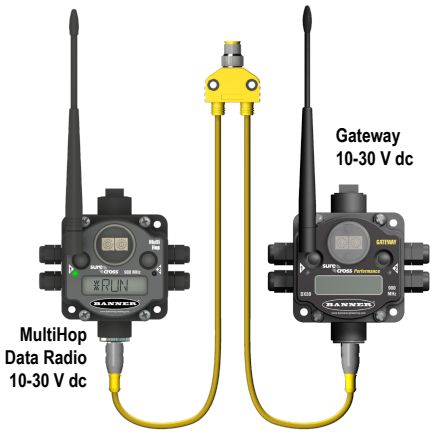
Use splitter cable **CSRB-M1250M125.47M125.73** to split from one power source to two *Flex*Power or solar powered devices. DO NOT use this cable to connect a *Flex*Power device to a 10 to 30 V dc powered device. (Refer to the wiring diagrams for each radio to avoid damaging the radios.)

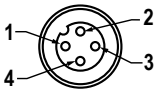
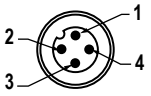
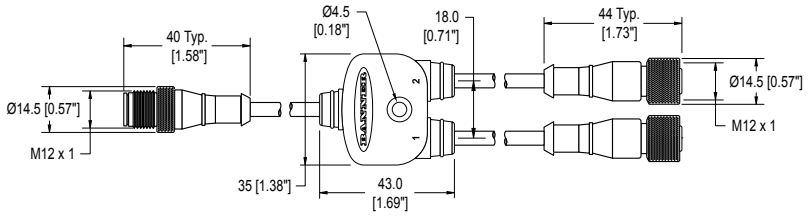
Use splitter cable **CSRB-M1253.28M1253.28M1253.28** to connect one *Flex*Power device (data radio, *Flex*Power Gateway, etc) to two power sources, such as the *Flex*Power Solar Supply and DX81P6 Battery Pack.

5-Pin Threaded M12/Euro-Style Splitter Cordsets—Rounded Junction			
Model	**Length**	**Style**	**Pinout**
CSRB-M1250M125.47M125.73	Trunk: 0 m (male) Branches: 0.14 m and 0.22 m (female)	Straight	Male  Female  1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray
CSRB-M1253.28M1253.28M1253.28	Trunk: 1 m (female) Branches: 1 m (male)		
			

4-pin Splitter Cables

Use the following 4-pin splitter cables to split power between two 10 to 30 V dc powered devices, such as a data radio and Gateway, or between a DX85 and Gateway.



4-Pin Threaded M12/Euro-Style Splitter Cordsets—Flat Junction			
Model	**Branches (Female)**	**Trunk (Male)**	**Pinout**
CSB-M1240M1240	No branch	No trunk	Female  Male  1 = Brown 2 = White 3 = Blue 4 = Black
CSB-M1240M1241	2 x 0.30 m (1 ft)	No trunk	
CSB-M1241M1241		0.30 m (1 ft)	
CSB-M1248M1241		2.50 m (8 ft)	
CSB-M12415M1241		4.57 m (15 ft)	
CSB-M12425M1241		7.60 m (25 ft)	
CSB-UNT425M1241		7.60 m (25 ft) Unterminated	
			

DB9 Splitter Cable

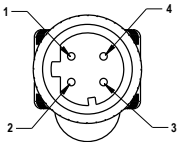
Use this cable to connect a Sure Cross device to power and to a 9-pin serial port on a computer or other industrial device.

BWA-DRSPLITTER

- Splitter cable, DB9 Female (RS232) trunk to 5-pin M12/Euro-style male and female
- The trunk and each branch is 0.3 meters long
- Datasheet: *155284*

Ethernet Cables

Use a crossover cable to connect the GatewayPro or DX83 Ethernet Bridge to a host system without using an Ethernet switchbox or hub. When using a switchbox or hub, use a straight cable.

RSCD RJ45 Ethernet to 4-Pin M12/Euro-Style Cordsets				
Model	**Length**	**Style**	**Dimensions**	**Pinout**
BWA-E2M	2 m (6.6 ft)	Straight RSCD RJ45 440		 1 = White/orange (+Tx) 2 = Orange (-Tx) 3 = White/blue (+Rx) 4 = N/C 5 = N/C 6 = Blue (-Rx) 7 = N/C 8 = N/C
BWA-E8M	8 m (26.2 ft)			 1 = White/Orange (+Tx) 2 = White/Blue (+Rx) 3 = Orange (-Tx) 4 = Blue (-Rx)
BWA-EX2M	2 m (6.6 ft)	Crossover RSCD RJ45CR 440		

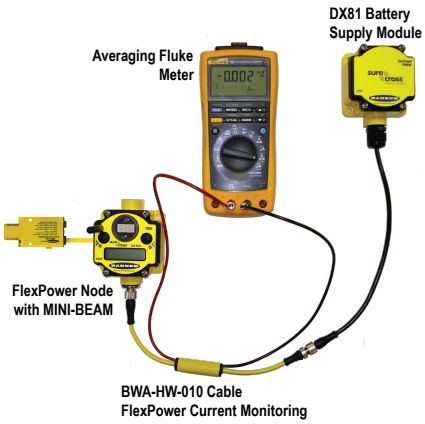
Other Special Cables

BWA-HW-026

- Splitter cable with a wall plug to supply external power to a MultiHop Radio operating at 1 Watt while it is connected to a computer
- The wall plug splits to 5-pin Euro-style male and 5-pin Euro-style female ends
- The male end plugs into the USB to RS-485 adapter cable (model number BWA-HW-006) and the female end plugs into the MultiHop radio

BWA-HW-010

- Cable, FlexPower Current Monitoring
- Connects a battery supply and FlexPower radio device to an averaging fluke meter to determine the current draw of the Node/sensor combination
- Based on the current draw, battery life estimates can be made

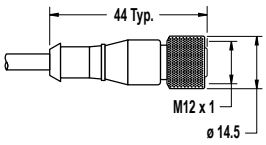
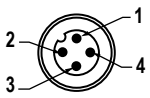


BWA-HW-006

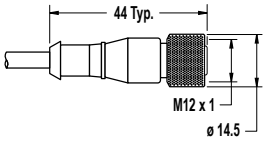
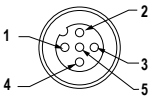
- Adapter cable, USB to RS-485
- Use with the User Configuration Software
- Requires BWA-HW-026 to work with 1 Watt Radios
- Datasheet: *140377*

BWA-UCT-900 • Adapter cable with power, USB to RS-485 • Use with the User Configuration Software • Works with all radios, including 1 Watt • Datasheet: *140377*	

MQDMC-401—Typically used to connect a USB-to-RS485 converter cable to the DX80...C IP20 housing models

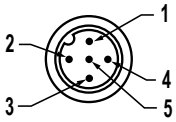
4-Pin Threaded M12/Euro-Style Cordsets—Single Ended				
Model	**Length**	**Style**	**Dimensions**	**Pinout (Male)**
MQDMC-401	0.3 m (1 ft)	Straight		 1 = Brown 2 = White 3 = Blue 4 = Black

MQDC1-506—The 6 foot long cordset ships with most Sure Cross wireless products, but other lengths are available.

5-Pin Threaded M12/Euro-Style Cordsets—Single Ended				
Model	**Length**	**Style**	**Dimensions**	**Pinout (Female)**
MQDC1-501.5	0.50 m (1.5 ft)	Straight		 1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray
MQDC1-506	1.83 m (6 ft)			
MQDC1-515	4.57 m (15 ft)			
MQDC1-530	9.14 m (30 ft)			

Wiring RS-485 and RS-232 Devices

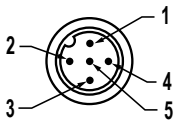
Wiring the 5-pin M12/Euro-style male connector depends on the model and power requirements of the device. Connecting power to the communication pins will cause permanent damage.

5-pin M12/Euro-style Male Connector	Pin	Wire Color	RS-485 Mode	RS-232 Mode
	1	Brown	10 to 30 V dc	10 to 30 V dc
	2	White	RS485 / D1 / B / +	RS-232 Tx
	3	Blue	dc common (GND)	dc common (GND)
	4	Black	RS485 / D0 / A / –	RS-232 Rx
	5	Gray	Comms Gnd *	Comms Gnd *

* For battery-powered operation, wire 3.6 V dc to 5.5 V dc to the gray wire. For 10 to 30 V dc MultiHop radios in RS-485 mode, there is no connection for the gray wire.

5-Pin M12/Euro-style Male Quick Disconnect

Integral 5-pin M12/Euro-style quick disconnect wiring depends on the model and power requirements of the device. Not all models can be powered by 10 to 30 V dc and not all models can be powered by 3.6 to 5.5 V dc. Refer to *Specifications* to verify the power requirements of your device. For *Flex*Power devices, do not apply more than 5.5 V to the gray wire.

5-pin M12/Euro-style (male)	Pin	Wire Color	Nodes Powered by 10 to 30 V dc	Nodes Powered by Battery or Battery Pack
	1	Brown	10 to 30 V dc	
	2	White		
	3	Blue	dc common (GND)	dc common (GND)
	4	Black		
	5	Gray		3.6 to 5.5 V dc