Using a Backup Battery with FlexPower

BANNER ®
more sensors, more solutions

Connecting a Backup Battery Supply Module

Using a Battery Backup with a DC Power Supply

In this configuration, the 10–30 V dc power supply is powering a FlexPower radio. The DX81-LITH Battery Supply Module acts as a battery backup to maintain operation of the radio during a power outage. With the MultiHop radios, you can read a register to determine if the radio is powered by 10–30V dc or a battery supply.
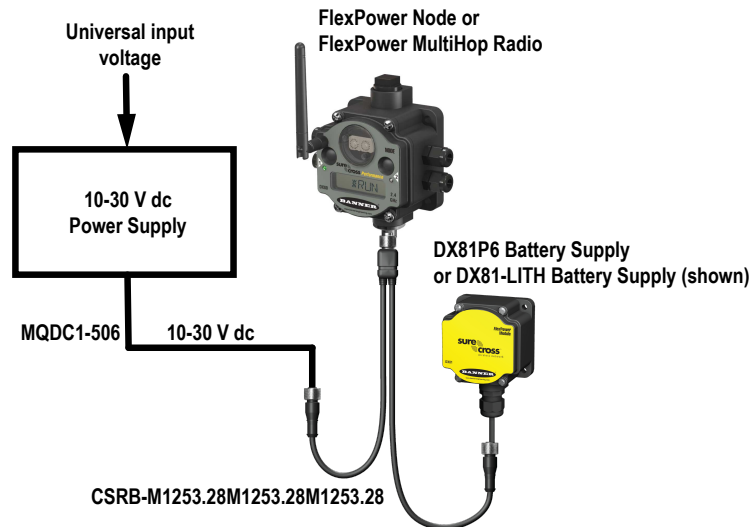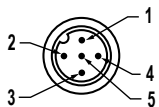

Figure 1. Powering from DC power and a battery backup

Use cordset **MQDC1-506** to wire the power supply to the splitter cable. This cordset has a 5-pin Euro female on one end and flying leads on the other end. This cable ships with most Sure Cross wireless products. (Wire the brown wire to power and the blue wire to ground. Ignore the other wires.)

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.
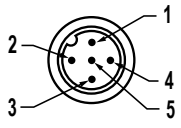
Apply Power to the Radio

Connecting power to the communication pins will cause permanent damage. For *Flex*Power devices, do not apply more than 5.5 V to the gray wire. The FlexPower radios will operate equally well when powered from the brown or gray wire. It is not necessary to supply both. The power for the sensors can be supplied by the radio's SPx terminals or from the 10 V dc to 30 V dc used to power the radio.

	Pin	Wire Color	Models powered by 10 to 30 V dc with RS-485	FlexPower models with RS-485	FlexPower models with RS-232
	1	brown	10 V dc to 30 V dc	10 V dc to 30 V dc	10 V dc to 30 V dc
	2	white	RS-485 / D1 / B / +	RS-485 / D1 / B / +	RS-232 Tx
	3	blue	dc common (GND)	dc common (GND)	dc common (GND)
	4	black	RS-485 / D0 / A / -	RS-485 / D0 / A / -	RS-232 Rx
	5	gray	-	3.6 V dc to 5.5 V dc	3.6 V dc to 5.5 V dc

Apply Power to the Node

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