



SureCross™ DX81H Battery Supply Module for DX99 Devices

Delivers and manages dc voltage from one 3.6V dc lithium primary battery for the DX99 battery-powered devices



Features

- Wireless solution for powering a DX99 FlexPower™ Node and sensor device in Class I, Division 1, Groups A, B, C, D; Class I, Zone 0, Group IIC (CSA C/US) and Group IIC, Zone 0 (LCIE/ATEX)
- Unique power management system to run the FlexPower Node and a device through switched power outputs
- Replaceable 3.6V dc Lithium “D” cell battery
- IP67 sealed enclosure

Battery life is application specific. Contact Banner Engineering’s application engineers for a battery life calculation for your specific application.

For additional information and a complete list of replacement parts, refer to Banner Engineering’s website, www.bannerengineering.com/surecross.

Models

Model	Power	Batteries	Cable
DX81H	3.6V dc Battery	One 3.6V Lithium “D” Cell	5-pin Euro Pigtail QD



WARNING . . . Not To Be Used for Personnel Protection

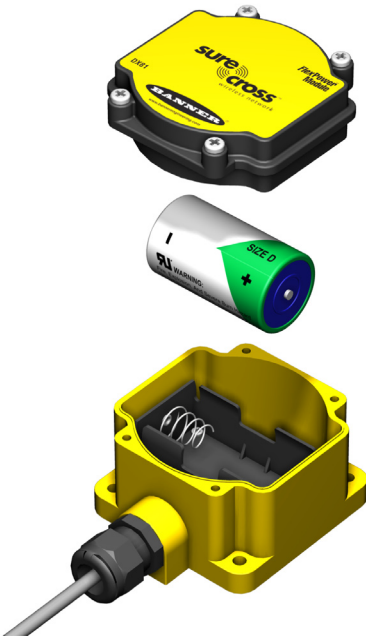
Never use these products as sensing devices for personnel protection. Doing so could lead to serious injury or death.

These devices do NOT include the self-checking redundant circuitry necessary to allow their use in personnel safety applications. A device failure or malfunction can cause either an energized or de-energized output condition. Consult your current Banner Safety Products catalog for safety products that meet OSHA, ANSI, and IEC standards for personnel protection.



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Battery Replacement



To replace the lithium “D” cell battery in the DX81 *FlexPower*™ battery kit,

1. Unplug the battery device from the SureCross device it powers.
2. Remove the four screws mounting the battery pack face plate to the body and remove the face plate.
3. Remove the discharged battery and replace with a new battery. Only use a 3.6V lithium battery from Xeno, model number XL-205F.
4. Verify the battery's positive and negative terminals align to the positive and negative terminals of the battery holder mounted within the case. The negative end is toward the spring. Caution: There is a risk of explosion if the replacement battery is incorrect.
5. After replacing the battery, allow up to 60 seconds for the device to power up.

When removing the battery, press the battery towards the negative terminal to compress the spring. Pry up on the battery's positive end to remove from the battery holder. Properly dispose of your used battery according to local regulations by taking it to a hazardous waste collection site, an e-waste disposal center, or other facility qualified to accept lithium batteries.

As with all batteries, these are a fire, explosion, and severe burn hazard. Do not burn or expose them to high temperatures. Do not recharge, crush, disassemble, or expose the contents to water.



Warning: Explosions may result in death or serious injury. Do not remove the instrument cover or open the wiring housing in explosive atmospheres when power and communications are on. Remove the battery-powered device from the hazardous location before opening the cover and replacing the battery.

Warning: The replacement battery **MUST** be a Banner approved battery, model number BWA-BATT-001. Use of a different battery will **VOID** the intrinsic safety rating of this device and may result in an explosion!

Warning: When replacing the battery, the negative end of the battery holder is the side with the spring terminal. This side is marked with a minus (-) sign.

Warning: Do not attempt to recharge the battery. These batteries are not rechargeable. Recharging may cause serious injury to personnel or damage the equipment. Replace only with factory recommended batteries.

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Specifications

General	
Mounting	#10 or M5 (M5 hardware included)
M5 Fasteners Max. Tightening Torque	0.56 N•m (5 in•lbf)
Case Material	Polycarbonate
Weight	0.26 kg (0.57 lb.)
External Cable Glands	One 1/2 NPT type
Cable Glands Max. Tightening Torque	0.56 N•m (5 in•lbf)
Connections	PVC cable; 5-pin Euro-style 150mm Pigtail QD
Environmental	
Environmental Rating*	IEC IP67; NEMA 6
Operating Temperature**	-40 to +70° C
Operating Humidity	95% max. relative (non-condensing)
Radiated Immunity	10 V/m, 80-2700 MHz (EN61000-6-2)
Shock and Vibration	IEC 68-2-6 and IEC 68-2-7 Shock: 30g, 11 millisecond half sine wave, 18 shocks Vibration: 0.5 mm p-p, 10 to 60 Hz

* Please refer to the SureCross™ Wireless I/O Network product manual, Banner p/n 132607, for installation and waterproofing instructions.

** Operating the devices at the maximum operating conditions for extended periods can shorten the life of the device.

Hookup Diagram

Only *FlexPower™* DX99 devices may be powered from this supply.

5-pin M12 Quick Disconnect Pinout



	Wire Color	Description
3	Blue	dc common (GND)
5	Gray	3.6V dc

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The manufacturer does not take responsibility for the violation of any warning listed in this document.



CAUTION . . .

Make no modifications to this product.

Any modifications to this product not expressly approved by Banner Engineering could void the user's authority to operate the product. Contact the Factory for more information.

Always use lightning arrestors/surge protection with all remote antenna systems to avoid invalidating the Banner Engineering Corp. warranty. No surge protector can absorb all lightning strikes. Do not touch the SureCross device or any equipment connected to the SureCross device during a thunderstorm.

WARRANTY: Banner Engineering Corp. warrants its products to be free from defects for one year. Banner Engineering Corp. will repair or replace, free of charge, any product of its manufacture found to be defective at the time it is returned to the factory during the warranty period. This warranty does not cover damage or liability for the improper application of Banner products. This warranty is in lieu of any other warranty either expressed or implied.

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