

SureCross DX81-LITH FlexPower Supply Module



Datasheet

The DX81 Battery Supply Module delivers and manages dc voltage from one 3.6 V dc lithium primary battery. FlexPower systems allow for a true wireless solution because the Node can be powered by battery power (3.6 to 5.5 V dc). Battery life is application specific. Contact Banner Engineering's application engineers for a battery life calculation for your specific application.



- Wireless solution for powering a FlexPower® Node and sensor device
- Unique power management system to run the FlexPower Node and a device through switched power outputs for up to 5 years, depending upon the power requirements of the device
- Replaceable 3.6 V dc Lithium "D" cell battery
- IP67 sealed enclosure

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

Model	Power	Battery	Cable
DX81-LITH	3.6 V dc battery	One 3.6 V Lithium "D" Cell	5-pin M12/Euro-style quick disconnect fitting with 150 mm (6 in) cable

5-pin M12/Euro-style Wiring

Use the battery supply module to power FlexPower® devices only.

5-pin M12/Euro-style Female Connector	Pin	Wire Color	Description	DX80...C Terminals
	3	Blue	dc common (GND)	V-
	5	Gray ¹	3.6 V dc	B+

Replacing the Battery

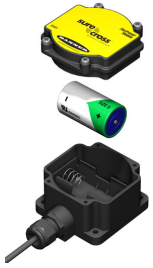
When the FlexPower Supply Module is installed outdoors or in a high humidity environment, apply conductive grease to the battery terminals to prevent moisture and corrosion buildup.

To replace the lithium "D" cell battery in the FlexPower Supply Module, follow these steps.

1. Unplug the battery module from the SureCross device it powers.
2. Remove the four screws mounting the battery module face plate to the body and remove the face plate.
3. Remove the discharged battery by pressing the battery towards the negative terminal to compress the spring. Pry up on the battery's positive end to remove from the battery holder.
4. Replace with a new battery. Only use a 3.6 V lithium battery from Xeno, model number XL-205F.
5. Verify the battery's positive and negative terminals align to the positive and negative terminals of the battery holder mounted within the case. Caution: There is a risk of explosion if the battery is replaced incorrectly.
6. After replacing the battery, allow up to 60 seconds for the device to power up.
7. 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 any other facility qualified to accept lithium batteries.

¹ Do not apply more than 5.5 V dc to the gray wire.





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.

The battery may be replaced in explosive gas atmospheres.

Replacement battery model number: BWA-BATT-001. For pricing and availability, contact Banner Engineering.

Specifications

Estimated Battery Life
19,000 mA-hours

Housing

Polycarbonate housing and rotary dial cover; polyester labels; EDPM rubber cover gasket; nitrile rubber, non-sulphur cured button covers
Weight: 0.26 kg (0.57 lbs)
Mounting: #10 or M5 (SS M5 hardware included)
Max. Tightening Torque: 0.56 N-m (5 lbf-in)

Certifications



CSA: Class I, Division 2, Groups A, B, C, D (Ex/A Ex nA II T4); Certificate: 1921239



LCIE/ATEX: Zone 2 (II 3G / Ex nA IIC); Certificate: LCIE 10 ATEX 1012 X

Wiring Access

One 1/2-inch NPT with 5-pin M/12Euro-style quick disconnect fitting and 150 mm (6 in) cable

Environmental Rating

IEC IP67; NEMA 6

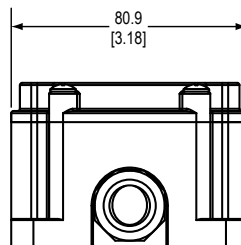
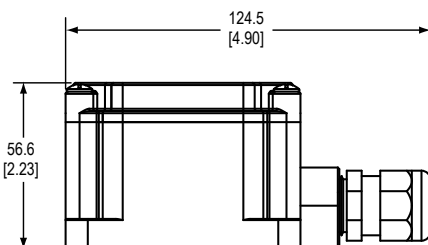
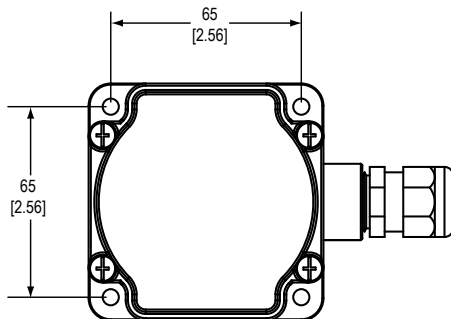
Operating Conditions²

-40 °C to +85 °C (-40 °F to +185 °F)
95% maximum relative humidity (non-condensing)
Radiated Immunity: 10 V/m, 80-2700 MHz (EN61000-6-2)

Shock and Vibration

IEC 68-2-6 and IEC 68-2-27
Shock: 30g, 11 millisecond half sine wave, 18 shocks
Vibration: 0.5 mm p-p, 10 to 60 Hz

Dimensions



Warnings

Violating Warnings. The manufacturer does not take responsibility for the violation of any warning listed in this document. 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. All specifications published in this document are

² Operating the devices at the maximum operating conditions for extended periods can shorten the life of the device.

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