

# SureCross DX81 FlexPower Supply Module

Delivers and manages dc voltage from one 3.6V dc lithium primary battery



- 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 five years, depending upon the power requirements of the device
- Replaceable 3.6V dc Lithium "D" cell battery
- IP67 sealed enclosure

FlexPower systems allow for a true wireless solution because the Node can be powered by battery power (3.6 to 5.5V dc). Battery life is application specific. Contact Banner Engineering's application engineers for a battery life calculation for your specific application.

For additional information, the most recent version of all documentation, and a complete list of accessories, refer to Banner Engineering's website, [www.bannerengineering.com/surecross](http://www.bannerengineering.com/surecross).

Model	Power	Batteries	Cable
DX81	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 this device as a sensing device for personnel protection. Doing so could lead to serious injury or death. This device does NOT include the self-checking redundant circuitry necessary to allow its use in personnel safety applications. A sensor failure or malfunction can cause either an energized or de-energized sensor output condition.

## 5-pin Euro-Style Hookup for DX81

Only FlexPower® DX80 devices may be powered from this supply.

	Wire No.	Wire Color	Description	DX80...C Terminal Labels
	3	Blue	dc common (GND)	V-
	5	Gray	3.6V dc	B+

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

## DX81 and DX81H FlexPower Module Battery Replacement

For outside or high humidity environments, conductive grease may be applied to the battery terminals to prevent moisture and corrosion buildup.

To replace the lithium "D" cell battery in the DX81 FlexPower™ battery kit, follow these steps.





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. Caution: There is a risk of explosion if the battery is replaced incorrectly.
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 any 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.

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

## Specifications

General	Environmental
<p><b>Estimated Battery Life</b> 19,000 mA·hours</p> <p><b>Housing</b> 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)</p> <p><b>Wiring Access</b> One 1/2-inch NPT with 5-pin Euro-style 150mm pigtail QD</p>	<p><b>Rating</b> Rating: IEC IP67; NEMA 6; (See UL section below for any applicable UL specifications)</p> <p><b>Operating Conditions</b> Operating Temperature: -40 to +85° C Operating Humidity: 95% max. relative (non-condensing) Radiated Immunity: 10 V/m, 80-2700 MHz (EN61000-6-2)</p> <p><b>Shock and Vibration</b> 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</p>

Refer to the SureCross® DX80 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.

## Certifications

### DX8x...C (External Wiring Terminal Models)

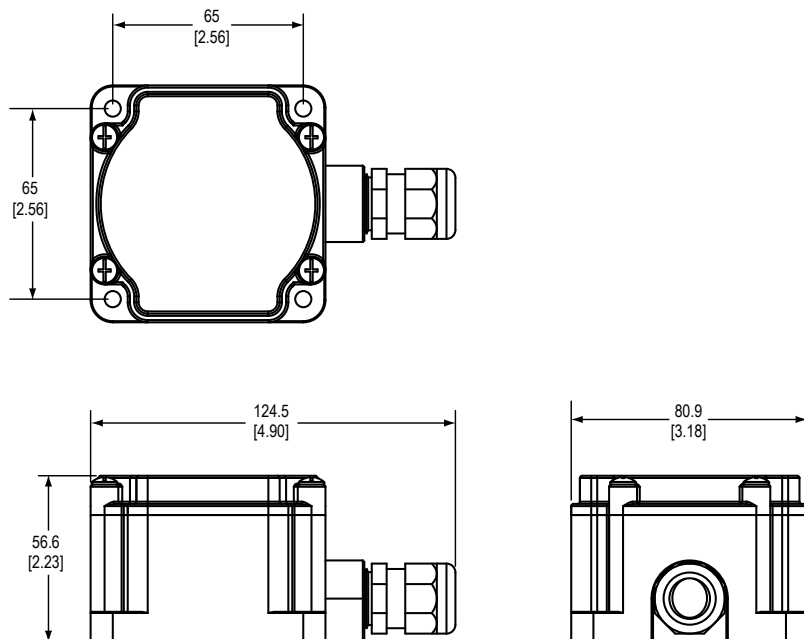


UL/CSA: Class I, Division 2, Groups A, B, C, D (Ex/A Ex nA II T4); Certificate: 1921239



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

## DX81 and DX81H Dimensions



## 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. Contact the Factory for more information.

**All specifications published in this document are subject to change.** Banner reserves the right to modify the specifications of products without notice. Banner Engineering reserves the right to update or change documentation at any time. For the most recent version of any documentation, refer to our website: [www.bannerengineering.com](http://www.bannerengineering.com). © 2006-2010 Banner Engineering Corp. All rights reserved.

## Banner Engineering Corp Limited Warranty

Banner Engineering Corp. warrants its products to be free from defects in material and workmanship for one year following the date of shipment. Banner Engineering Corp. will repair or replace, free of charge, any product of its manufacture which, at the time it is returned to the factory, is found to have been defective during the warranty period. This warranty does not cover damage or liability for misuse, abuse, or the improper application or installation of the Banner product.

**THIS LIMITED WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES WHETHER EXPRESS OR IMPLIED (INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE), AND WHETHER ARISING UNDER COURSE OF PERFORMANCE, COURSE OF DEALING OR TRADE USAGE.**

This Warranty is exclusive and limited to repair or, at the discretion of Banner Engineering Corp., replacement. **IN NO EVENT SHALL BANNER ENGINEERING CORP. BE LIABLE TO BUYER OR ANY OTHER PERSON OR ENTITY FOR ANY EXTRA COSTS, EXPENSES, LOSSES, LOSS OF PROFITS, OR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES RESULTING FROM ANY PRODUCT DEFECT OR FROM THE USE OR INABILITY TO USE THE PRODUCT, WHETHER ARISING IN CONTRACT OR WARRANTY, STATUTE, TORT, STRICT LIABILITY, NEGLIGENCE, OR OTHERWISE.**

Banner Engineering Corp. reserves the right to change, modify or improve the design of the product without assuming any obligations or liabilities relating to any product previously manufactured by Banner Engineering Corp.



more sensors, more solutions