SureCross™ DX99 Intrinsically Safe (IS) FlexPower™ Node with Integrated Battery

Configurable Node with an integrated battery and metal housing for 2 discrete inputs and 2 analog inputs

The SureCross™ DX99 is a radio frequency network system built around a Gateway and one or more Intrinsically Safe Nodes.

- Wireless industrial I/O device with two discrete inputs and two analog inputs
- Certified for use in Class I, Division 1, Groups A, B, C, D; Class II, Division 1, Groups E, F, G; Class III, Division 1; and Zone 0 (Group IIC) and Zone 20 (Group II) when properly installed in accordance with the National Electrical Code, the Canadian Electrical Code, LCI/E/ATEX, or applicable local codes/regulations
- Integrated lithium battery for up to five years of service
- Frequency Hopping Spread Spectrum (FHSS) technology and Time Division Multiple Access (TDMA) control architecture combine to ensure reliable data delivery within the unlicensed Industrial, Scientific, and Medical (ISM) bands
- Transceivers provide two-way communication between the Gateway and Node, including fully acknowledged data transmission; lost RF links are detected and relevant outputs set to user-defined conditions
- Internal or external antenna

For additional information and a list of accessories, including FCC approved antennas, refer to Banner Engineering’s website, www.bannerengineering.com/surecross.

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### Models Table

<table>
<thead>
<tr>
<th>Model</th>
<th>Frequency</th>
<th>Antenna</th>
<th>Housing</th>
<th>Boost Voltage</th>
<th>I/O</th>
</tr>
</thead>
<tbody>
<tr>
<td>DX99N9X1S2N0M2X0B2</td>
<td>900 MHz ISM Band</td>
<td>External</td>
<td>Metal, dual chamber</td>
<td>18V</td>
<td>Discrete Inputs: Two Selectable</td>
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<tr>
<td>DX99N9X1W2N0M2X0B2</td>
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<tr>
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<tr>
<td>DX99N2X1S2N0M2X0B2</td>
<td>2.4 GHz ISM Band</td>
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(Models table continued on next page.)

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**WARNING . . . Not To Be Used for Personnel Protection**

Never use these products for personnel protection. Doing so could lead to serious injury or death. These products do NOT include the self-checking redundant circuitry necessary to allow their use in personnel safety applications. A 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.
## SureCross™ DX99 Wireless FlexPower™ Node

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SureCross™ DX99 Wireless FlexPower™ Node

Specifications

Many of the parameters are configurable. The values in the tables represent factory defaults unless otherwise noted.

Radio

Range, with standard 2 dB antenna*
- 900 MHz: Up to 4.8 kilometers (3 miles)
- 2.4 GHz: Up to 3.2 kilometers (2 miles)

Transmit Power
- 900 MHz: 21 dBm Conducted
- 2.4 GHz: 18 dBm Conducted, ≤ 20 dBm EIRP

* The range depends on the environment and line of sight. High-gain antennas are available to increase the range.

Spread Spectrum Technology. FHSS (Frequency Hopping Spread Spectrum)

Antenna
- Ext. Reverse Polarity SMA, 50 Ohms
- Max. Tightening Torque. 0.45 N∙m (4 in∙lbf)

Link Timeout. Defined by Gateway

General

Power. 3.6V dc low power option

Power Consumption. Application dependent

Inputs

Discrete Inputs. Sourcing or Sinking (DIP switch selectable)

Discrete Input Rating. See control drawing

Discrete Input Sample Rate. Switch configurable, see tables

Discrete Input Report Rate. Switch configurable, see tables

Discrete Input ON Condition
- Sourcing: Greater than 8V
- NPN Sinking: Less than 0.7V

Discrete Input OFF Condition
- Sourcing: Less than 4.5V
- NPN Sinking: Greater than 2.2V or open

Analog Inputs.
- 0 to 20 mA or 0 to 10V (depending on model)

Analog Input 1 Sample / Report Rate. Switch configurable, see tables

Analog Input 2 Sample / Report Rate. 1 second / 16 seconds

Accuracy. 0.1% of full scale +0.01% per °C

Resolution. 12-bit

Environmental

Operating Temperature*. -40 to +70° C

Operating Humidity. 95% max. relative (non-condensing)

Radiated Immunity. 10 V/m, 80-2700 MHz (EN61000-6-2)

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

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

Radio Compliance

900 MHz Models
- FCC ID TGUDX80 - This device complies with FCC Part 15, Subpart C, 15.247
- IC: 7044A-DX8009

2.4 GHz Models
- FCC ID UE300DX80-2400 - This device complies with FCC Part 15, Subpart C, 15.247
- ETSI/EN: In accordance with EN 300 328: V1.7.1 (2006-05)
- IC: 7044A-DX8024

It is Banner Engineering’s intent to fully comply with all national and regional regulations regarding radio frequency emissions. Customers who want to re-export this product to a country other than that to which it was sold must ensure that the device is approved in the destination country. A list of approved countries appears in the SureCross DX80 Wireless Product Manual, in the Agency Certifications section. The SureCross wireless products were certified for use in these countries using the standard antenna that ships with the product. When using other antennas, verify you are not exceeding the transmit power levels allowed by local governing agencies. Consult with Banner Engineering if the destination country is not on this list.
SureCross™ DX99 Wireless FlexPower™ Node

Classified Areas Certifications

(DX99...B, Intrinsic safely, Metal Housing)

CSA

- Class I, Division 1, Groups A, B, C, D; Class II, Division 1, Groups E, F, G;
- Class III, Division 1; Certificate: 2008243
- Ex ia IIC T4 AEx ia IIC T4

LCIE/ATEX

- Zone 0 (Group IIC) and Zone 20 (Group II) Certificate: LCIE 08 ATEX 6098 X **
- Ex ia IIC T4 Ex iaD 20 T4 +82°C IP68

Special Conditions for Safe Use imposed by Intrinsic Safety Certificate LCIE 08 ATEX 6098 X:

- Ambient temperature range is -40°C to +70°C.
- SureCross™ DX99 FlexPower devices can only be connected to Intrinsically Safe certified equipment or simple apparatus as defined by EN 60079-11.
- All connected equipment must comply with the Entity Parameters (Safety Parameters) listed in the Control Drawings document 141513.
- The device must only use a lithium battery manufactured by XENO, type XL-205F.

<table>
<thead>
<tr>
<th>Included with Device</th>
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<th>Qty</th>
<th>Item</th>
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</thead>
<tbody>
<tr>
<td>Antenna Pack</td>
<td>BWA-HW-012</td>
<td>1</td>
<td>Flexible antenna extension cable, three screws</td>
</tr>
<tr>
<td>Antenna</td>
<td>BWA-902-C, or BWA-202-C</td>
<td>1</td>
<td>Antenna, 902-928 MHz, 2 dBi Omni, Rubber Swivel RSMA Male, or Antenna, 2.4 GHz, 2 dBi Omni, Rubber Swivel RSMA Male</td>
</tr>
<tr>
<td>SureCross Literature CD</td>
<td>79685</td>
<td>1</td>
<td>SureCross Literature CD</td>
</tr>
</tbody>
</table>
The SureCross™ DX80 is a radio frequency network system built around a Gateway and one or more Nodes.

- Wireless industrial I/O device with up to three configurable thermocouple inputs (defaults to J-type), one thermistor input, and two discrete (sinking) inputs
- Certified for use in Class I, Division 1, Groups A, B, C, D; Class II, Division 1, Groups E, F, G; Class III, Division 1; and Zone 0 (Group IIC) and Zone 20 (Group II) when properly installed in accordance with the National Electrical Code, the Canadian Electrical Code, LCE/ATEX, or applicable local codes/regulations
- Integrated cold junction compensation (CJC)
- Switch configurable to allow for user programmability
- Integrated lithium battery for up to five years of service
- Frequency Hopping Spread Spectrum (FHSS) technology and Time Division Multiple Access (TDMA) control architecture combine to ensure reliable data delivery within the unlicensed Industrial, Scientific, and Medical (ISM) frequency bands
- Transceivers provide two-way communication between the Gateway and Node, including fully acknowledged data transmission; lost RF links are detected and relevant outputs set to user-defined conditions
- Internal or external antenna

For additional information and a list of accessories, including FCC approved antennas, refer to Banner Engineering's website, www.bannerengineering.com/surecross.

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<td>900 MHz ISM Band</td>
<td>Metal, dual chamber</td>
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<td>Thermocouple Inputs: Three</td>
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<td>Internal</td>
<td>Thermistor Input: One for CJC</td>
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<td>Discrete Inputs: Two Sinking</td>
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<td>DX99N2X1S2N0T4X0B0</td>
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⚠️ WARNING . . . Not To Be Used for Personnel Protection

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

These products do NOT include the self-checking redundant circuitry necessary to allow their use in personnel safety applications. A 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.
Specifications

Many of the parameters are configurable. The values in the tables represent factory defaults unless otherwise noted.

Radio

Range, with standard 2 dB antenna*
- 900 MHz: Up to 4.8 kilometers (3 miles)
- 2.4 GHz: Up to 3.2 kilometers (2 miles)

Transmit Power
- 900 MHz: 21 dBm Conducted
- 2.4 GHz: 18 dBm Conducted, ≤ 20 dBm EIRP

* The range depends on the environment and line of sight. High-gain antennas are available to increase the range.

Antenna
- Ext. Reverse Polarity SMA, 50 Ohms
- Max. Tightening Torque: 0.45 N∙m (4 in∙lbf)

Link Timeout.
- Defined by Gateway

Power Consumption.
- 3.6V dc low power option

Application dependent

General

Interface
- Two bi-color LEDs
- Two push buttons
- Six character LCD

Inputs

Discrete Inputs.
- Two Sinking

Discrete Input Rating.
- See control drawing

Discrete Input Sample Rate.
- 1 second

Discrete Input Report Rate.
- On Change of State

Discrete Input ON Condition.
- Less than 0.7V

Discrete Input OFF Condition.
- Greater than 2.2V or open

Discrete Input Sample Rate.
- 1 second

Discrete Input Report Rate.
- Periodic, 16 seconds

Thermocouple Inputs.
- Three

Thermocouple Input Sample Rate.
- 1 second

Thermocouple Input Report Rate.
- Periodic, 16 seconds

Thermistor Inputs.
- One, model number BWA-THERMISTOR-001

Resolution.
- 0.1° C, 24-bit A/D converter

Thermocouple Accuracy.
- 0.1% of full scale reading + 0.8° C

Thermistor Accuracy.
- 0.4° C (10 to 50° C); Up to 0.8° C (−40 to +85° C)

Environmental

Operating Temperature*
- −40 to +70° C

Operating Humidity.
- 95% max. relative (non-condensing)

Radiated Immunity.
- 10 V/m, 80-2700 MHz (EN61000-6-2)

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

Radio Compliance

900 MHz Models
- FCC ID TGUDX80 - This device complies with FCC Part 15, Subpart C, 15.247
- IC: 7044A-DX8009

2.4 GHz Models
- FCC ID UE300DX80-2400 - This device complies with FCC Part 15, Subpart C, 15.247
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SureCross™ DX99 FlexPower™ Thermocouple Node

Classified Areas Certifications

(DX99...B, Intrinsically Safe, Metal Housing)

CSA
Class I, Division 1, Groups A, B, C, D; Class II, Division 1, Groups E, F, G;
Class III, Division 1; Certificate: 2008243
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- The device must only use a lithium battery manufactured by XENO, type XL-205F.

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<td>BWA-202-C</td>
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<td>Antenna, 2.4 GHz, 2 dBD Omni, Rubber Swivel RSMA Male</td>
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SureCross™ DX99 FlexPower™ Intrinsically Safe RTD Node with Integrated Battery

The SureCross™ DX99 is a radio frequency network system built around a Gateway and one or more Intrinsically Safe Nodes.

- Wireless industrial I/O device with up to four 3-wire Pt100 RTDs; other types are available with configuration
- Certified for use in Class I, Division 1, Groups A, B, C, D; Class II, Division 1, Groups E, F, G; Class III, Division 1; and Zone 0 (Group IIC) and Zone 20 (Group II) when properly installed in accordance with the National Electrical Code, the Canadian Electrical Code, LCE/ATEX, or applicable local codes/regulations
- Integrated lithium battery for up to five years of service
- Frequency Hopping Spread Spectrum (FHSS) technology and Time Division Multiple Access (TDMA) control architecture combine to ensure reliable data delivery within the unlicensed Industrial, Scientific, and Medical (ISM) frequency bands
- Transceivers provide two-way communication between the Gateway and Node, including fully acknowledged data transmission
- Lost RF links are detected and relevant outputs set to user-defined conditions
- Internal or external antenna

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<td></td>
</tr>
<tr>
<td>DX99N2X1W0N0R4X0D0</td>
<td>2.4 GHz ISM Band</td>
<td>Metal, single chamber</td>
<td>Internal</td>
<td></td>
</tr>
</tbody>
</table>

RTD Inputs: Four 3-wire

### WARNING . . . Not To Be Used for Personnel Protection

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

These products do NOT include the self-checking redundant circuitry necessary to allow their use in personnel safety applications. A 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.
SureCross™ DX99 FlexPower™ RTD Node

Specifications

Many of the parameters are configurable. The values in the tables represent factory defaults unless otherwise noted.

Radio

Range, with standard 2 dB antenna*

- 900 MHz: Up to 4.8 kilometers (3 miles)
- 2.4 GHz: Up to 3.2 kilometers (2 miles)

Transmit Power

- 900 MHz: 21 dBm Conducted
- 2.4 GHz: 18 dBm Conducted, ≤ 20 dBm EIRP

RTD Inputs

- Four, 3-wire

Input Sample Rate

- 1 second

Input Report Rate

- Periodic, 16 seconds

Resolution

- 0.1° C, 24-bit A/D Converter

Accuracy

- 0.1% of full scale

Spread Spectrum Technology

- FHSS (Frequency Hopping Spread Spectrum)

Antenna

- Ext. Reverse Polarity SMA, 50 Ohms
- Max. Tightening Torque: 0.45 N-m (4 in-lbf)

Link Timeout

- Defined by Gateway

General

Power

- 3.6V dc low power option

Power Consumption

- Application dependent

Interface

- Two bi-color LEDs
- Two push buttons
- Six character LCD

RTD Inputs

- Four, 3-wire

Input Sample Rate

- 1 second

Input Report Rate

- Periodic, 16 seconds

Resolution

- 0.1° C, 24-bit A/D Converter

Accuracy

- 0.1% of full scale

Environmental

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

* The range depends on the environment and line of sight. High-gain antennas are available to increase the range.

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

Radio Compliance

900 MHz Models

- FCC ID TGUDX80 - This device complies with FCC Part 15, Subpart C, 15.247
- IC: 7044A-DX8009

2.4 GHz Models

- FCC ID UE300DX80-2400 - This device complies with FCC Part 15, Subpart C, 15.247
- ETSI/EN: In accordance with EN 300 328: V1.7.1 (2006-05)
- IC: 7044A-DX8024

It is Banner Engineering’s intent to fully comply with all national and regional regulations regarding radio frequency emissions. Customers who want to re-export this product to a country other than that to which it was sold must ensure that the device is approved in the destination country. A list of approved countries appears in the SureCross DX80 Wireless Product Manual, in the Agency Certifications section. The SureCross wireless products were certified for use in these countries using the standard antenna that ships with the product. When using other antennas, verify you are not exceeding the transmit power levels allowed by local governing agencies. Consult with Banner Engineering if the destination country is not on this list.
SureCross™ DX99 FlexPower™ RTD Node

Classified Areas Certifications

(DX99...B, Intrinsically Safe, Metal Housing)

CSA
- Class I, Division 1, Groups A, B, C, D; Class II, Division 1, Groups E, F, G;
- Class III, Division 1; Certificate: 2008243
- Ex ia IIC T4  AEx ia IIC T4

LCIE/ATEX
- Zone 0 (Group IIIC) and Zone 20 (Group II) Certificate: LCIE 08 ATEX 6098 X **
- II 1 GD  Ex ia IIC T4  Ex iaD 20 Ta +82°C IP68

** Special Conditions for Safe Use imposed by Intrinsic Safety Certificate LCIE 08 ATEX 6098 X:
- Ambient temperature range is -40°C to +70°C.
- SureCross™ DX99 FlexPower devices can only be connected to Intrinsically Safe certified equipment or simple apparatus as defined by EN 60079-11.
- All connected equipment must comply with the Entity Parameters (Safety Parameters) listed in the Control Drawings document 141513.
- The device must only use a lithium battery manufactured by XENO, type XL-205F.

<table>
<thead>
<tr>
<th>Included with Device</th>
<th>Model</th>
<th>Qty</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antenna Pack</td>
<td>BWA-HW-012</td>
<td>1</td>
<td>Flexible antenna extension cable, three screws</td>
</tr>
<tr>
<td>Antenna</td>
<td>BWA-902-C, or BWA-202-C</td>
<td>1</td>
<td>Antenna, 902-928 MHz, 2 dBi Omni, Rubber Swivel RSMA Male, or Antenna, 2.4 GHz, 2 dBi Omni, Rubber Swivel RSMA Male</td>
</tr>
<tr>
<td>SureCross Literature CD</td>
<td>79685</td>
<td>1</td>
<td>SureCross Literature CD</td>
</tr>
</tbody>
</table>
SureCross™ DX99 Intrinsically Safe (IS) FlexPower™ Node with Integrated Battery

Configurable Node with an integrated battery and metal housing for bridge inputs

The SureCross™ DX99 is a radio frequency network system built around a Gateway and one or more Intrinsically Safe Nodes.

- Wireless industrial I/O device with two sinking discrete inputs and two bridge inputs
- Certified for use in Class I, Division 1, Groups A, B, C, D; Class II, Division 1, Groups E, F, G; Class III, Division 1; and Zone 0 (Group IIC) and Zone 20 (Group II) when properly installed in accordance with the National Electrical Code, the Canadian Electrical Code, LCE/ATEX, or applicable local codes/regulations
- Integrated lithium battery for up to five years of service
- Frequency Hopping Spread Spectrum (FHSS) technology and Time Division Multiple Access (TDMA) control architecture combine to ensure reliable data delivery within the unlicensed Industrial, Scientific, and Medical (ISM) bands
- Transceivers provide two-way communication between the Gateway and Node, including fully acknowledged data transmission; lost RF links are detected and relevant outputs set to user-defined conditions
- Internal or external antenna

For additional information and a list of accessories, including FCC approved antennas, refer to Banner Engineering’s website, [www.bannerengineering.com/surecross](http://www.bannerengineering.com/surecross).

<table>
<thead>
<tr>
<th>Model</th>
<th>Frequency</th>
<th>Antenna</th>
<th>Housing</th>
<th>I/O</th>
</tr>
</thead>
<tbody>
<tr>
<td>DX99N9X1S2N0B2X0B0</td>
<td>900 MHz ISM Band</td>
<td>External</td>
<td>Metal, dual chamber</td>
<td>Discrete Inputs: Two Sinking Bridge Inputs: Two</td>
</tr>
<tr>
<td>DX99N9X1W2N0B2X0B0</td>
<td>900 MHz ISM Band</td>
<td>Internal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DX99N2X1S2N0B2X0B0</td>
<td>2.4 GHz ISM Band</td>
<td>External</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DX99N2X1W2N0B2X0B0</td>
<td>2.4 GHz ISM Band</td>
<td>Internal</td>
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These products do NOT include the self-checking redundant circuitry necessary to allow their use in personnel safety applications. A 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.
SureCross™ DX99 Wireless FlexPower™ Node

LED Status

<table>
<thead>
<tr>
<th>Gateway Status</th>
<th>LED 1</th>
<th>LED 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power ON</td>
<td>Green ON</td>
<td>—</td>
</tr>
<tr>
<td>Modbus Communication Active</td>
<td>—</td>
<td>Yellow Flash</td>
</tr>
<tr>
<td>Modbus Communication Error</td>
<td>—</td>
<td>Red Flash</td>
</tr>
<tr>
<td>System Error</td>
<td>Red Flash</td>
<td>Red Flash</td>
</tr>
</tbody>
</table>

Node Status

<table>
<thead>
<tr>
<th>Node Status</th>
<th>LED 1</th>
<th>LED 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>RF Link Ok</td>
<td>Green Flash (1 per sec)</td>
<td>—</td>
</tr>
<tr>
<td>RF Link Error</td>
<td>—</td>
<td>Red Flash (1 every 3 sec)</td>
</tr>
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<td>Red Flash</td>
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Specifications

Many of the parameters are configurable. The values in the tables represent factory defaults unless otherwise noted.

Radio

**Range**
- 900 MHz: Up to 4.8 kilometers (3 miles)
- 2.4 GHz: Up to 3.2 kilometers (2 miles)

**Transmit Power**
- 900 MHz: 21 dBm Conducted
- 2.4 GHz: 18 dBm Conducted, ≤20 dBm EIRP

**Spread Spectrum Technology**

- FHSS (Frequency Hopping Spread Spectrum)

**Antenna**

- Ext. Reverse Polarity SMA, 50 Ohms
- Max Tightening Torque: 0.45 N·m (4 in-lbf)

**Link Timeout**

- Defined by Gateway

* With the standard 2 dB antenna. High-gain antennas are available, but the range depends on the environment and line of sight. To determine the range of your wireless network, perform a Site Survey.

General

**Power**

- Requirements: 3.6V dc low power option
- Consumption: Application dependant

**Interface**

- Two bi-color LEDs
- Two push buttons
- Six character LCD
SureCross™ DX99 Wireless FlexPower™ Node

Inputs
Discrete Inputs. Two NPN/Sinking
Discrete Input Rating. See control drawing
Discrete Input Sample Rate. Switch configurable, see tables
Discrete Input Report Rate. Switch configurable, see tables

Discrete Input ON Condition. Less than 0.7V
Discrete Input OFF Condition. Greater than 2.2V or open.

Environmental
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
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SureCross™ DX99 Wireless FlexPower™ Node

For more information:
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Tel: 91-20-66405624
Fax: 91-20-66405623
www.bannereengineering.co.in
india@bannerengineering.com

Accessories

Banner Part No: 12533
Model No: BWA-HW-019
Description: M36 Flange Mount
Price Ea: $68

Banner Part No: 12534
Model No: BWA-HW-020
Description: U-Bolt Mounting Bracket
Price Ea: $63

Banner Part No: 11834
Model No: BWA-HW-016
Description: Antenna Feedthrough, SS, 1/2” NPT
Price Ea: $62

Banner Part No: 11835
Model No: BWA-HW-017
Description: Antenna Feedthrough, SS, 3/4” NPT
Price Ea: $66

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.

Lightning Arrestors/Surge Protection. 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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