



## Basic Whisker.BlockXD™

### General Description

**Whisker.BlocksXD™** are battery powered, long range wireless devices that can monitor the world around them from as much as 1 mile away or more. They are designed to be extremely flexible and can easily be configured to meet exacting requirements.

The Basic **Whisker.BlockXD™** is configured with an internal temperature sensor and two external digital inputs. The sample period for these inputs can be set by the user from 5 minutes to every 24 hours.

### Power

The Basic **Whisker.BlockXD™** is powered from a field replaceable internal battery pack which will last 5+ years with a 5-minute sample period. This block can optionally be configured with a long-life battery pack capable of extending operate to 15+ years.

### Antenna

The **Whisker.BlockXD™** can be configured for an internal or external antenna. External antennas are connected via an RPSMA connector, allowing the customer to select the antenna that is appropriate for the application.

It is important to select the proper antenna for the application. Generally, smaller or less expensive antennas will exhibit lower performance and therefore less transmission range.

Digital Six Labs offers a variety of antennas that are compatible with **Whisker.BlockXD™**:

| Part Number    | Size     | Cost   | Range  |
|----------------|----------|--------|--------|
| INTERNAL       | Smallest | Lowest | Good   |
| TQX-900-A (AI) | Small    | Good   | Better |
| TQX-900-E      | Larger   | Higher | Best   |

### Internal Channels

As stated earlier, the Basic **Whisker.BlockXD™** is configured to monitor three channels: internal temperature and two external digital inputs.

The internal temperature sensor is accurate to within +/- 3°C.

Up to two dry contacts can be monitored using the two digital inputs. These can be connected to the **Whisker.BlockXD™** using a 4-conductor cable.

### External Connections

External connection is made via a 4-conductor cable.

| Color  | Description |
|--------|-------------|
| Black  | GND         |
| Yellow | DIN1        |
| Brown  | DIN2        |
| Red    | NA          |



## Mechanical



## Electrical Specification

| Parameter                             | Minimum | Typical | Maximum | Units              |
|---------------------------------------|---------|---------|---------|--------------------|
| Battery life – Standard Pack          |         | 5       |         | Year               |
| Battery life – Extended Pack          |         | 15      |         |                    |
| Operating Temp. Range (standard pack) | -20     | 25      | 40      | °C                 |
| Operating Temp. Range (extended pack) | -40     | 25      | 60      | °C                 |
| Transmission range                    |         | 1       | 20      | Miles <sup>1</sup> |
| Temperature measurement range         | -40     |         | 80      | °C                 |
| Temperature measurement accuracy      | -3      |         | +3      | °C                 |
| Maximum periodic sample rate          | -       | -       | 24      | Hours/sample       |
| Minimum periodic sample rate          | 5       | -       | -       | Minutes/sample     |

## Order Information

| Part Number           | Description  |
|-----------------------|--|
| <b>XB-900-0000-IS</b> | 902-928MHz Basic Whisker.BlockXD with internal antenna and standard battery pack |
| <b>XB-900-0000-IE</b> | 902-928MHz Basic Whisker.BlockXD with internal antenna and extended battery pack |
| <b>XB-900-0000-ES</b> | 902-928MHz Basic Whisker.BlockXD with external antenna and standard battery pack |
| <b>XB-900-0000-EE</b> | 902-928MHz Basic Whisker.BlockXD with external antenna and extended battery pack |
| <b>XB-868-0000-IS</b> | 868MHz Basic Whisker.BlockXD with internal antenna and standard battery pack     |
| <b>XB-868-0000-IE</b> | 868MHz Basic Whisker.BlockXD with internal antenna and extended battery pack     |
| <b>XB-868-0000-ES</b> | 868MHz Basic Whisker.BlockXD with external antenna and standard battery pack     |
| <b>XB-868-0000-EE</b> | 868MHz Basic Whisker.BlockXD with external antenna and extended battery pack     |

