

## Operational Description

The DC-BLE-1 is comprised of a printed circuit assembly, several discrete components, a micro-controller and a coin cell battery holder.

It is powered by a 3V button cell CR-1025 battery. The PCB accepts power through soldered Keystone battery holder located on one side of the device. The supply voltage can be in the range of 3.0 to 3.6 VDC.

The main processing unit of DC-BLE-1 is the Nordic Semi nRF52832. It is a micro-controller with a 2.4GHz transceiver. Memory configuration is 192 Kbytes of Flash and 24 Kbytes of RAM. When the device is powered, it will begin to transmit a packet of data approximately every 9 seconds. The main crystal oscillator is 32MHz

Only soft device firmware provided by Nordic Semiconductor and firmware written by DevCircuits, LLC and its' affiliates can be installed on the DC-BLE-1. The firmware for the DC-BLE-1 is solely controlled by DevCircuits, LLC. and is not distributed to end users.

The DC-BLE-1 is housed in a weatherized, PCB/ABS hybrid enclosure and houses a tuned antenna inside.

Technical Characteristics	
Bluetooth Version:	V5.0 (BLE mode)
Frequency Range:	2402–2480MHz
Data Rate:	1Mbps
Modulation:	GFSK
Quantity of Channels:	40
Channel Separation:	2MHz
Type of Antenna:	PCB Antenna
Antenna Gain:	-10.99dBi