# 1. General description.

"BT Adapter" is a portable device to transfer data trough a serial communication port RS232 to Bluetooth 2.x.

The aim of this device is the wireless interconnection between compatible "Safran Observation and Location Unit" and a PC unit using Bluetooth 2.x

## 1.1 Functional Description

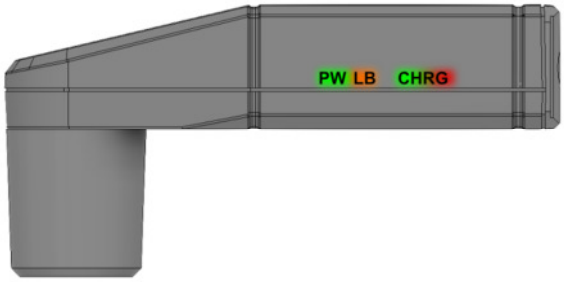


Fig. 1


Fig. 2

- ON/OFF Switch. Device power ON/OFF
- "PW" Led, Power ON indicator. When the device powered, the "PW" Led emits green light for 5-6sec and then the Led switch off.
- "LB" Led, Low Battery indicator. The "LB" Led emits orange light when the battery voltage is under 3.55V.
- If the battery voltage is at critical low threshold, the device switches off automatically in order to protect the battery.
- USB Micro, battery charge. It use only for battery charging and NOT as USB communication port.
- "CHRG" Led, Battery Charging Status indicator. During the charging process emits Red light. If the battery has full charge emits Green light. Indication exists only if a Micro USB charger is plugged in.
- To ensure IP67 the "BT Adapter" device must be plugged in to the corresponding Vector device and the back elastic cup tightly closed.

## 1.2 Technical Specifications

- RS232 serial communication.
  - Baud Rate 9600
  - 8 bits
  - No parity
  - 1 stop bit
- Bluetooth: Compatible with Bluetooth 2.x.
- Bluetooth Device name: "xxx-xxxx". Where "xxx-xxxx" is the device serial number.
- Charger: Combatable with Micro USB 500mA.
- Battery: LiPo Battery 3.7V 450mA.

- Protections:
  - Resettable fuses at charging circuit and power supply circuit.
  - Protection circuit to avoid deep battery discharging. The device switches off automatically if the battery is at critical low voltage.
- Lifetime:

| | Mode | Life time (h) |
|---|---|---|
| 1 | IDLE | 50 |
| 2 | Transmit 30 data packet per min | 10 |
| 3 | Cont.Transmit | 8 |

- Storage Temperature -40°C to +63°C
- Operational Temperature -20°C to +55°C
- Battery charge Temperature 0°C to +40°C
- The battery must be charged if the device has stored and it has not charged for more than 4 months

## 1.3 Physical Characteristics

- Dimensions

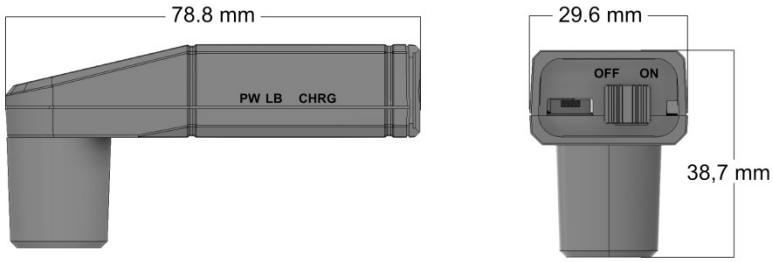


Fig. 3

- Weight
  - Type BAL: 39gr ±4gr.
  - Type BAF: 43gr ±4gr.

# 2. REGULATORY APPROVAL

This section outlines the regulatory information for the devices for the following countries:

- Europe
- United States
- Canada

## 2.1 Europe

The BAL and BAF devices have been tested to R&TTE Directive 1999/5/EC Essential Requirements for Safety, Electromagnetic Compatibility (EMC) and RoHS. A Notified Body Opinion has also been issued. All test reports are available.

## 2.2 United States

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## 2.3 Canada

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device. Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisee aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d'en compromettre le fonctionnement.

## 3. FCC/IC Statement

**FCC Statement**:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

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—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**IC statement**:

This device complies with Industry Canada license-exempt RSS standard(s).
Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.
Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisee aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d'en compromettre le fonctionnement.