



## **i-B2X W, Wristband Tag Manual**

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## **1 Radio Frequency Compliance Statement**

### **FCC Compliance**

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

## 2 Introduction

### 2.1 Preparations

This installation manual must be read carefully prior to starting the installation. The described installation works assume that installation materials like cable, antenna and tag holder etc are available.

### 2.2 Recommended Procedure

1. Check the Scope of Delivery according to the Bill of Delivery
2. Read this manual completely
3. Do the initial operation for every single tag
4. Mount the tags
5. An additional performance check of the tags and a system test can now be done

### 2.3 Scope of this Document

This document is the user's manual of the model i-B2X W tag.

This document is intended only for mechanical installation resp. everyday use.

Both mounting techniques described in this document are suitable for ATEX conformity.

### 2.4 Safety Instructions

#### Operational Safety

The device described in this manual is for exclusive operation by trained employees.

The correct and safe use of these systems assumes that operating and service personnel follow the safety measures described in the manual alongside the generally acceptable safety procedures.

If there is a possibility that safe operation cannot be guaranteed the system must be switched off and secured against accidental use. Then the service unit responsible must be informed.

#### Do not open the housing

There is no need to open the housing. There are no user serviceable parts inside. Set-up and configuration during initial operation is done wireless with the built-in air interface.

### 2.5 Responsibility

IDENTEC SOLUTIONS is not responsible for any errors occurring in this document.

### 2.6 Associated Documents

- ID.0669.EN\_i-B2X W — Wristband tag Datasheet

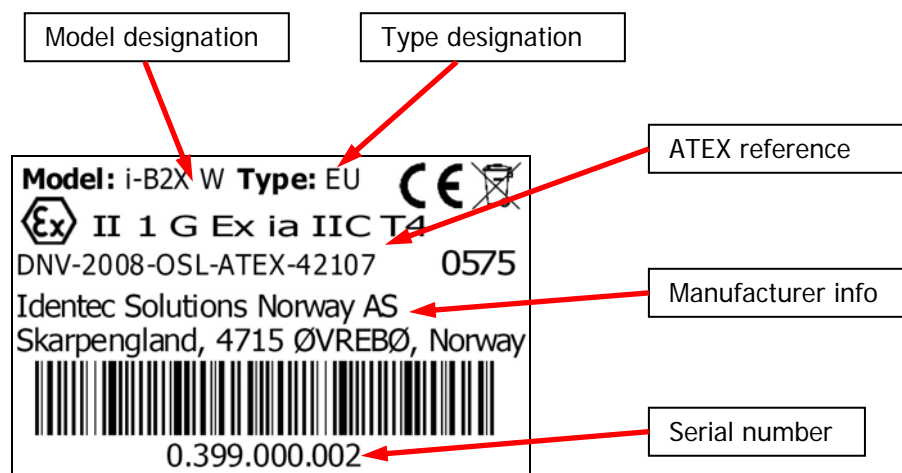
## 2.7 Scope of Delivery—Visual Inspection

Check delivery whether it is complete and for any damages. If the delivery is not complete or damaged immediately inform the carrier. The dispatch and service organization of IDENTEC SOLUTIONS should also be informed to facilitate the repair or exchange of the system.

## 2.8 Optical Identification of the Tag



The label is on the rear side of the tag, protected by the wristband. In order to inspect it slightly lift up the wristband between the two loops of the tag housing.



View onto the label

### **3 Initial Operation**

#### **Important Note**

Do not open the housing! Configuration is done using the built-in air interface of the i-B2X W.

#### **Configuration**

The i-B2X W is configured using the i-PROG MB programming device.

#### **Things to be configured**

- The ping rate: from 0.5 to 60 seconds in steps of 0.5 seconds

## 4 Tag Mounting Techniques



The tag is carried as every standard wristwatch.

The band should not be too loose.

This avoids that the tag slides down over the wrist and prevents possible injury.



For maximum convenience put the end of the wristband under the loop.

Now adjust the loop to avoid too much of the band to stick out.





## 5 Maintenance

### 5.1 General

In principle, the ILR system is maintenance-free. When correctly installed it operates for many years without any problems.

### 5.2 Precautionary Maintenance

Regular checking to the system is recommended. Make sure that the housing of the tag has no damage. If there are any damages as holes or cracks, the tags should be replaced and returned to IDEN TEC SOLUTIONS immediately.

Regular checking of all ports and cables belonging to the system is recommended. Unstable connections could lead to damage and malfunctions of the system and therefore should be repaired as soon as possible.

#### A Brief Checklist

- Are all housings intact?
- Are all cables intact?
- Are all connectors intact?
- Are all connectors securely fastened?
- Are all screws still tight?
- Is there suddenly a malfunction at a specific unit?

### 5.3 Returns

Parts or main components returned for repair or exchange must be handled with great care. PC cards must be returned in the appropriate ESD-protecting packaging material.

All returns should include a completed returns form (see appendix) and be sent to the local distributor or to:

IDEN TEC SOLUTIONS AG  
Service Department  
Millenium Park 2  
6890 Lustenau  
AUSTRIA / AUTRICHE

## 6 Technical Data

### Operating Data Long-Range RFID (ILR, Beacon Technology)

Read range	Up to 30 m (90 ft) in free air
Operating frequency	868 MHz (EU) or 915 MHz (NA) ISM band
Operation mode	Transmits a pre-programmed data string in regular intervals
Repetition rate (ping rate)	0,5 – 60 seconds, adjustable in steps of 0,5 seconds
Transmit power	< 1 mW
Compatibility	i-PORT 4B, i-PORT MB, i-CARD CF B

### Electrical Data

Power supply	Lithium battery (not replaceable)
Battery lifetime expectancy	4 years @ 2 seconds ping rate

### Configuration

The transponder is configured using the i-PROG MB at a distance of max. 5 cm.

Ping rate	Configurable from 0.5 to 60 seconds in steps of 0.5 seconds
User data	9 Bytes (user definable)

### Environmental Conditions

Operating temperature	-30 to +70 °C (-22 to +158 °F)
Shock	50 G, 3 times acc. DIN IEC 68-2-27 several times onto concrete floor from 1 m height
Vibration	3 G, 20 sine wave cycles, 5 to 150 Hz, DIN IEC 68-2-6 5 G, noise 5 to 1.000 Hz, 30 minutes DIN IEC 68-2-64

### Mechanical Data

Dimensions	43 × 38.5 × 14.5 mm (1.7 × 1.5 × 0.57 inches)
Casing	Plastics
Mass	40 g
Protection class	IP 65

### Certifications

EMC	CE (EN 300 220-1, -3; ETSI EN 301 489-1, -3), FCC Part 15 (US), Industry Canada
ATEX/IECEx certificates	II 1 G Ex ia IIC T4, Certificate Number: DNV-2008-OSL-ATEX-42107

### Dimensional Drawing

