6xxxN Series
Wireless Pressure Sensor

# QUICK START GUIDE

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## PRODUCTS COVERED BY THIS QUICK START GUIDE

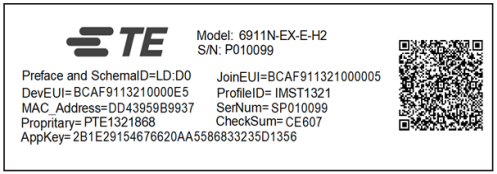
This guide is intended for use with several TE Connectivity wireless pressure sensors. This includes:

| Model Number | BLE | LoRaWAN™ Amer & Europe | Hazloc Certified | Non-Hazloc |
|---|---|---|---|---|
| 65xxN-NX | • | | | • |
| 65xxN-EX | • | | • | |
| 69xxN-NX | • | • | | • |
| 69xxN-EX | • | • | • | |

**Note:** Please review datasheet for specific pressure ranges and port sizes. In addition, HazLoc approved devices require specific handling and mounting to conform to regulation. Please refer to additional included documentation. The user manual, with all required RF compliance information, is available online on TE.com

## Contents

Sensor

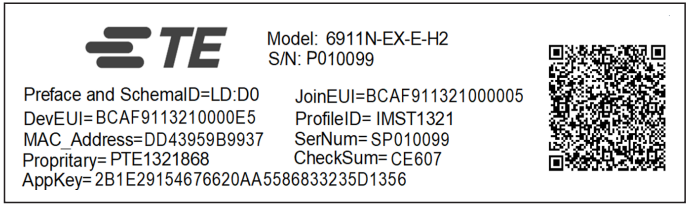



Device keys
(LoRaWan models only)

Battery
installation tab


Battery
(Saft LS17330)

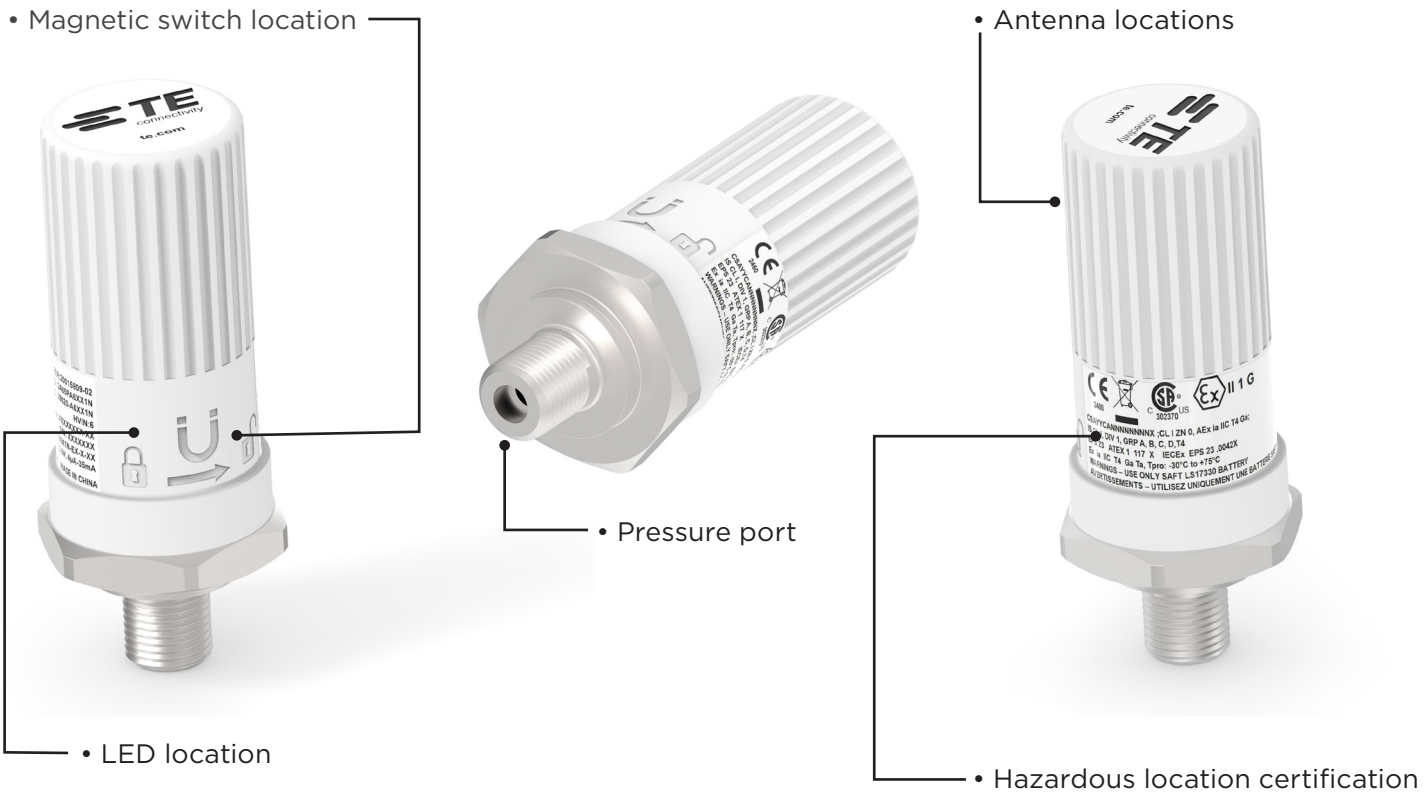
## LoRa Keys Device Label Content




## Example

1 LW:D0 2 BCAF911321000005 3 BCAF9113210000E5
4 IMST1321 5 DD439 6 59B9937:SP010099 7 PTE1321868
8 Appkey2B1E29154676620AA5586833235D1356
9 Model-6911N-EX-E-H2 10 CE607

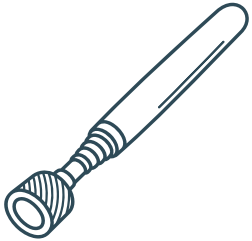
| Item | Field Value | CODE | Definition |
|---|---|---|---|
| 1 | LW and D0 | LW:D0 | Preface LW is used as a marker for information headers, D0 stands for Device Schema Version 0 |
| 2 | JoinEUI | BCAF911321000005 | JoinEUI is a global application ID stored in terminal devices |
| 3 | DevEUI | BCAF9113210000E5 | DevEUI is the device unique identifier specified in the LoRaWAN protocol |
| 4 | ProfileID | ProfileID | IMST is the vendor identifier, 1321 is the device type identifier |
| 5 | MAC_Adress | MAC_Adress | Mac Addr is the unique identification number of the device |
| 6 | SerNum | SerNum | S stands for Serial Number, P010099 is the specific value of the serial number |
| 7 | Proprietary | Proprietary | P stands for Proprietary, TE is the brand name, 1321 is the device type, 868 is the frequency band |
| 8 | Appkey | Appkey | Appkey is the security key when register the sensor into the gateway |
| 9 | Model Number | Model Number | Model number , example 6911N-EX-E-H2 |
| 10 | CheckSum | CheckSum | C stands for CheckSum; the value is calculated using CRC16-modbus algorithm |


• Magnetic switch location
• Antenna locations
• Pressure port
• LED location
• Hazardous location certification

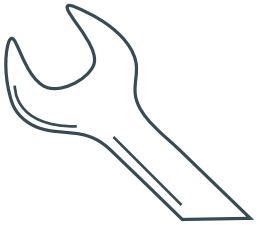
## RECOMMENDED TOOLS (NOT INCLUDED)

- Open end or adjustable wrench
- Magnet, such as a magnetic pick up tool

**TE Connectivity (TE) recommends** a magnet of sufficient flux density that it can create a magnetic field strength of 25 mT at the switch location shown on the housing.



Magnetic pick up tool



Open end wrench

## INSTALLING THE APP

TE provides a quick and simple way to connect to your sensor. Using our TE SensorConnect App, available from the Apple App Store or the Google Play Store, you can do any of the following,

- Initial setup and configuration of the sensor
- Monitor live measurements from the sensor
- Check current software version of the sensor
- Upgrade to new sensor software versions when available.

As new features come available make sure you are always on the latest version of TE SensorConnect

Scan the QR code to download the app on your mobile phone or tablet.

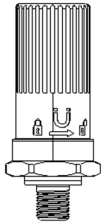
Apple App Store

Google Play Store

## Installing the battery

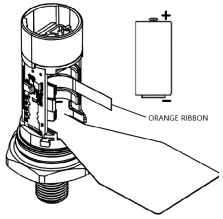
The TE sensor requires a battery for operation. A Saft model LS 17330, 2/3 A size is required for compliance to safety standards including ATEX and IECEx. TE does not recommend use of other battery manufacturers or models. Performance is not guaranteed without the proper battery.

1



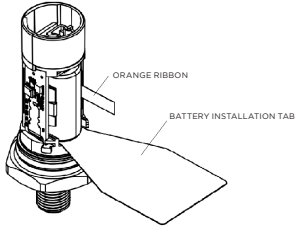
- Remove the top cover
- Follow the guiding direction twist to unlock position and pull up on the top cover

2



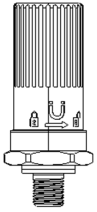

- Place the battery installation tab under the battery
- Put the orange ribbon back of the cavity before installing the battery
- Install the positive terminal of the battery upward

3




- Pull the battery installation tab out after installing the battery

4



- Install the top cover and tighten it
- Follow the Locking direction

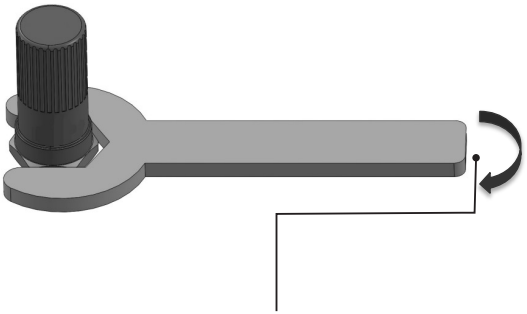
**Always use a new battery to ensure proper sensor operation and battery monitoring.**

## Sensor Mounting

The pressure sensor should be installed in a clean and compatible thread, the use of an open-end wrench is recommended. For the ¼ NPT thread the use of pipe thread sealant or Teflon tape is recommended. The NPT threaded part should be tightened 2-3 turns from finger tight (T.F.F.T). For ¼ BSPP threads mounting torque for the sensor of pressure ranges 2 to 35 bar should not exceed 30Nm, and for sensors with ranges over 200 bar the mounting torque should not exceed 35 Nm.

**Tighten by hand to just a light finger-tight, then use a torque wrench with the appropriate torque.**

Do not tighten the sensor by twisting on the housing, damage on the sensor will occur



Pressure Sensor Range **2 to 35 Bar,** max torque is **30Nm**

Pressure Sensor Range **200 and 350 Bar,** max torque is **35Nm**

Open end wrench size: 1-7/16in or 36mm

Assembly tightening torque depends on many factors, including lubrication, coating, and surface finish. The user should qualify the tighten torque in their application.

### 1) Unable to see sensor when scanning for devices using BLE?

- Check to make sure battery is properly inserted, paying attention to the battery polarity
- The sensor BLE radio may be in a sleep condition, use a magnet and touch it near the magnet icon on the white housing for a period of 1-2s and look for the Yellow LED to start flashing briefly. The BLE radio will now be active for 1 hour.

### 2) Unable to connect my LoRaWAN sensor to my LoRaWAN gateway

- Check to make sure battery is properly inserted, paying attention to the battery polarity
- The sensor radio may be in a sleep condition, use a magnet and touch it near the magnet icon on the white housing for a period of 1-2s and look for the Yellow LED to start flashing briefly. The sensor will now be active for 1 hour.
- Ensure you use the LoRaWAN devices keys found inside when connecting your gateway and LoRaWAN Network server, if you have lost these keys please contact TE customer care for support.
- Follow the user manual and install guides found on TE.com

### 3) How do I determine battery level?

- You can use the TE SensorConnect app to connect and find sensor information such as battery level, live data, settings, etc.

### 4) How do I know what fitting to use

- Check with the system you are connecting the sensor to and determine if its NPT or BSPP and then ensure you are using the correct sensor or use an adapter.

### 5) Where do I find a new battery when I need to replace it

- TE recommends only to use the SAFT LS17330 model battery and only purchase them from their authorized distributors, see their website for this information.

### 6) Why is the battery level still low after replacing the battery?

- After replacing the old battery with a new battery, you need to reset the battery level which can be done using the TE SensorConnect app or sending the reset command over BLE via your application.

Published 10-2024

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Authorized Distributor

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