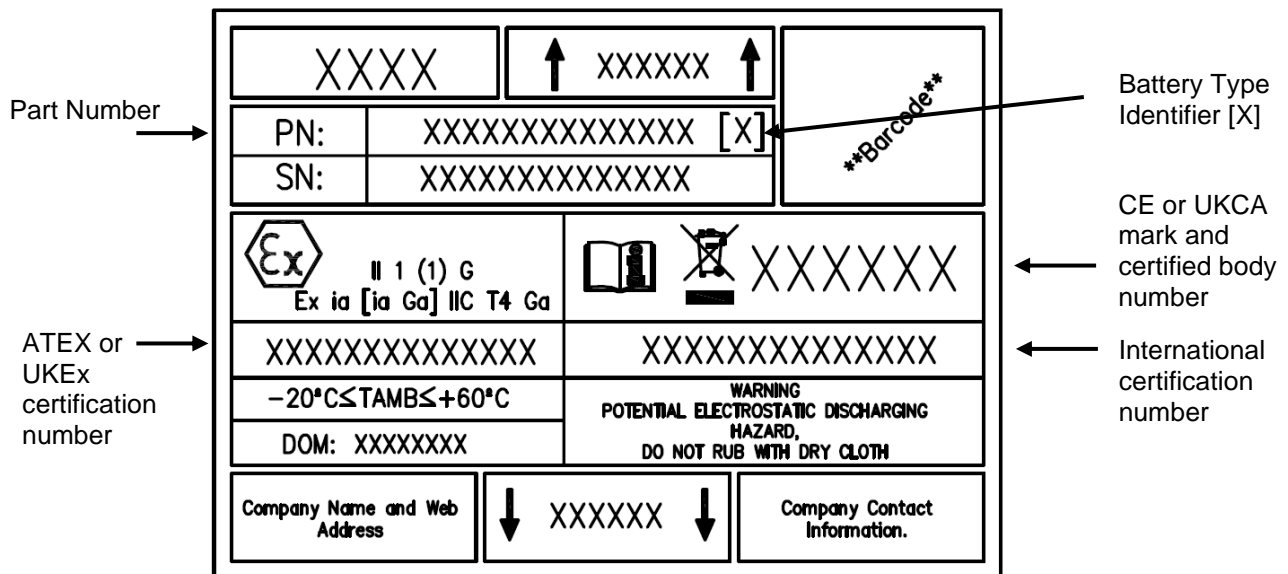# External Sensor Interface with Battery
# Safety Guide

**HWM**

⚠️ | **Warning:** This manual contains important safety and operating information.
Please read, understand, and follow the instructions / warnings contained in this manual.

## Label drawings



Part Number

PN: XXXXXXXXXXXXX [X]
SN: XXXXXXXXXXXXX

Battery Type Identifier [X]

CE or UKCA mark and certified body number

ATEX or UKEx certification number

International certification number

Ex II 1 (1) G
Ex ia [ia Ga] IIC T4 Ga

XXXXXX

−20°C≤TAMB≤+60°C

DOM: XXXXXXXX

WARNING
POTENTIAL ELECTROSTATIC DISCHARGING HAZARD,
DO NOT RUB WITH DRY CLOTH

Company Name and Web Address

XXXXXX

Company Contact Information.

(Layout can vary according to port configuration).

## Entity Parameters

### 4-20mA / Voltage

|  | Output Parameters | Input Parameters |
|---|---|---|
| **Parameters** | Uo = 28 V<br>Io = 87 mA<br>Po = 0.61 W<br>Co = 83 nF<br>Lo = 4.69 mH | Ui = 5.88 V<br>Ii = 0.7 A<br>Pi = 1.1 W<br>Ci = 2.88 uF<br>Li = 2.6 uH |

### SDI12

|  | Output Parameters | Input Parameters |
|---|---|---|
| **Comms Parameters** | Uo = 5.88 V<br>Io = 12.2 mA<br>Po = 18 mW<br>Co = 1 uF<br>Lo = 1 mH | Ui = 5.88 V<br>Ii = 340 mA<br>Pi = 0.8 W<br>Ci = 0.5 uF<br>Li = 0.8 mH |
| **Supply Parameters** | Uo = 12.6 V<br>Io = 192 mA<br>Po = 1 W<br>Co = 1 uF<br>Lo = 0.97 mH | Ui = 5.88 V<br>Ii = 340 mA<br>Pi = 0.8 W<br>Ci = 0.5 uF<br>Li = 0.8 mH |

### RS485 (Modbus)

|  | Output Parameters | Input Parameters |
|---|---|---|
| **Comms Parameters** | Uo = 5.88 V<br>Io = 24.4 mA<br>Po = 75 mW<br>Co = 1 uF<br>Lo = 1 mH | Ui = 5.88 V<br>Ii = 340 mA<br>Pi = 0.8 W<br>Ci = 0.5 uF<br>Li = 0.8 mH |
| **Supply Parameters** | Uo = 12.6 V<br>Io = 192 mA<br>Po = 1 W<br>Co = 1 uF<br>Lo = 0.97 mH | Ui = 5.88 V<br>Ii = 340 mA<br>Pi = 0.8 W<br>Ci = 0.5 uF<br>Li = 0.8 mH |

## Part Number make-up – ESIB2/xxyy/zz/Vs/IS

| ESIB2 | /xxyy | /zz | /Vs | /IS |
|-------|-------|-----|-----|-----|
| HWM Family name with revision | Sensor Input Configuration | Pass through / Mounting option | Battery Configuration | Safety Designation |

See appendix 4 in the Intelligens / COMLogIS Basic User Guide Part 1/2 (MAN-142-0001) for details of the pressure sensor options available.

The part-number field of the label includes an area which shows a 'battery type' indication. This is for HWM use only and can vary according to the internal battery components fitted during production. Valid types are 'E' or 'T'; Where blank (on earlier builds of product), 'T' is fitted.

⚠ **Warning:**

For an External Sensor Interface with Battery with a different part number format/revision eg ESIB/xxyy/Vs/IS, Refer to appropriate/previous version(s) of this manual for certified Entity Parameters.

⚠ **Warning:**

For the External Sensor Interface with Battery, the connected intrinsically safe equipment must be certified with Entity Parameters. Any intrinsically safe equipment intended for connection to the External Sensor Interface with Battery must have compatible Entity Parameters and be connected and installed as per the manufacturer's instructions.

The External Sensor Interface with Battery must only be used with the Intelligens / COMLog™IS data logger, HWM Part number H95/xxxxxxx/xxxxxx/IS

⚠ **Warnings:**

- POTENTIAL ELECTROSTATIC CHARGING HAZARD, DO NOT RUB WITH A DRY CLOTH.
- DO NOT OPEN WHEN EXPLOSIVE ATMOSPHERE IS PRESENT.

⚠ **Warning: Contains Lithium Batteries**

If batteries are exposed - do not short circuit, re-charge, puncture, incinerate, crush, immerse, force discharge or expose to temperatures above the declared operating temperature range of the product. **Risk of fire or explosion**. These batteries are sealed units which are not hazardous when used according to the recommendations.

**Additional information is available in the Basic User guide Part 1/2 (MAN-142-0001) available from the HWM website.**

**If further support or assistance is required, please contact HWM Technical Support on +44 (0)1633 489479 (option 5) or e-mail cservice@HWM-Water.com**

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MANEX-142-0005-D (ESIB Safety Guide)