

# External Sensor Interface with Battery Safety Guide



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

## Label drawings

UKEx certified products:

UKEx  
certification  
number

XXXX		↑ XXXXXX ↑	**Barcode**
PN:	XXXXXXXXXXXXXXXXXX		
SN:	XXXXXXXXXXXXXXXXXX		
			<p>WARNING POTENTIAL ELECTROSTATIC DISCHARGING HAZARD, DO NOT RUB WITH DRY CLOTH</p>
XXXXXXXXXXXXXXXXXX			
-20°C ≤ TAMBS ≤ +60°C			
DOM: XXXXXXXX			
Company Name and Web Address		↓ XXXXXX ↓	Company Contact Information.

UKCA mark and  
certified body  
number

ATEX & IECEx certified products:

ATEX  
certification  
number

XXXX		↑ XXXXXX ↑	**Barcode**
PN:	XXXXXXXXXXXXXXXXXX		
SN:	XXXXXXXXXXXXXXXXXX		
			<p>WARNING POTENTIAL ELECTROSTATIC DISCHARGING HAZARD, DO NOT RUB WITH DRY CLOTH</p>
XXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXX	
-20°C ≤ TAMBS ≤ +60°C			
DOM: XXXXXXXX			
Company Name and Web Address		↓ XXXXXX ↓	Company Contact Information.

CE mark and  
certified body  
number

International  
certification  
number

## Entity Parameters

4-20mA / Voltage		
	Output Parameters	Input Parameters
Parameters	Uo = 28 V Io = 87 mA Po = 0.61 W Co = 83 nF Lo = 4.69 mH	Ui = 5.88 V Ii = 0.7 A Pi = 1.1 W Ci = 2.88 uF Li = 2.6 uH

SDI12		
	Output Parameters	Input Parameters
<b>Comms Parameters</b>	Uo = 5.88 V Io = 12.2 mA Po = 18 mW Co = 1 uF Lo = 1 mH	Ui = 5.88 V Ii = 340 mA Pi = 0.8 W Ci = 0.5 uF Li = 0.8 mH
<b>Supply Parameters</b>	Uo = 12.6 V Io = 192 mA Po = 1 W Co = 1 uF Lo = 0.97 mH	Ui = 5.88 V Ii = 340 mA Pi = 0.8 W Ci = 0.5 uF Li = 0.8 mH

RS485 (Modbus)		
	Output Parameters	Input Parameters
<b>Comms Parameters</b>	Uo = 5.88 V Io = 24.4 mA Po = 75 mW Co = 1 uF Lo = 1 mH	Ui = 5.88 V Ii = 340 mA Pi = 0.8 W Ci = 0.5 uF Li = 0.8 mH
<b>Supply Parameters</b>	Uo = 12.6 V Io = 192 mA Po = 1 W Co = 1 uF Lo = 0.97 mH	Ui = 5.88 V Ii = 340 mA Pi = 0.8 W Ci = 0.5 uF 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



### 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](mailto:cservice@HWM-Water.com)