

External Sensor Interface with Battery Safety Guide

MANEX-142-0005

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Document Control

Issue	Details	Author	Date
1	Draft	AE	25/01/2016
A	Release – Update of port parameters	AE	21/03/2016
B	Update of port parameters part number format and web site address	BB	17/10/2017

SCHEDULE DRAWING

Certified product. No modifications permitted to this drawing without approval of an ATEX authorised person. Any modifications must also be submitted to the Notified Body for approval.

External Sensor Interface with Battery





Safety Guide - Version 1.1



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

Label drawings and Entity Parameters

External Sensor Interface with Battery





XXXXXXX		↑ XXXXX ↑	
PN	XXXXXXXXXX		
SN	XXXXXX		
	II 1 (1) G		
Ex ia [ia IIC] IIC T4 Ga			0518
ITS16ATEX28451X		IECEX ITS 16.0030X	
-20°C ≤ Tamb ≤ +60°C		WARNING - POTENTIAL ELECTROSTATIC CHARGING HAZARD, DO NOT RUB WITH A DRY CLOTH.	
DOM:- XX/XX/XXXX			
HWM-Water-Limited www.hwmglobal.com		↓ INPUT ↓	Ty Coch House, Llantarnam Park Way, Cwmbran, NP44 3AW, UK.

SDI-12

	Output Parameters	Input Parameters
Comms Parameters	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
Supply Parameters	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
Comms Parameters	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
Supply Parameters	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

XXXXXXX		↑ XXXXX ↑	
PN	XXXXXXXXXX		
SN	XXXXXX		
	II 1 (1) G		
Ex ia [ia IIC] IIC T4 Ga			0518
ITS16ATEX28450X		IECEX ITS 16.0028X	
-20°C ≤ Tamb ≤ +60°C		WARNING - POTENTIAL ELECTROSTATIC CHARGING HAZARD, DO NOT RUB WITH A DRY CLOTH.	
DOM:- XX/XX/XXXX			
HWM-Water-Limited www.hwmglobal.com		↓ INPUT ↓	Ty Coch House, Llantarnam Park Way, Cwmbran, NP44 3AW, UK.

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

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 01633 489479 (option 5) or e-mail cservice@HWM-Water.com

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