External Sensor Interface with Battery Safety Guide

MANEX-142-0005

Andy Earp

Document Control

Issue	Details	Author	Date
1	Draft	AE	25/01/2016
Α	Release – Update of port parameters	AE	21/03/2016
В	Update of port parameters part number format and web site address		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.



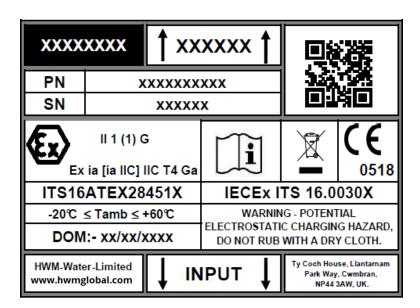
External Sensor Interface with Battery Safety Guide - Version 1.1



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

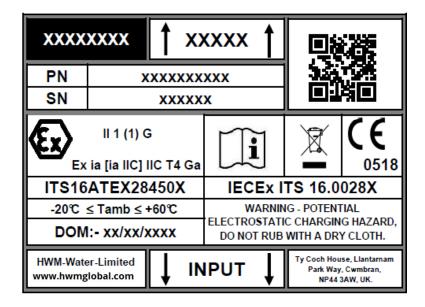


SDI-12

	Output	Input
	Parameters	Parameters
	Uo = 5.88 V	Ui = 5.88 V
Comms	lo = 12.2 mA	li = 340 mA
Parameters	Po = 18 mW	Pi = 0.8 W
1 didilictors	Co = 1 uF	Ci = 0.5 uF
	Lo = 1 mH	Li = 0.8 mH
	Uo = 12.6 V	Ui = 5.88 V
Supply	lo = 192 mA	li = 340 mA
Parameters	Po = 1 W	Pi = 0.8 W
i didilictors	Co = 1 uF	Ci = 0.5 uF
	Lo = 0.97 mH	Li = 0.8 mH

RS485 (Modbus)

	Output	Input
	Parameters	Parameters
	Uo = 5.88 V	Ui = 5.88 V
Comms	lo = 24.4 mA	Ii = 340 mA
Parameters	Po = 75 mW	Pi = 0.8 W
T di dillictoro	Co = 1 uF	Ci = 0.5 uF
	Lo = 1 mH	Li = 0.8 mH
	Uo = 12.6 V	Ui = 5.88 V
Supply	lo = 192 mA	li = 340 mA
Parameters	Po = 1 W	Pi = 0.8 W
i didilictors	Co = 1 uF	Ci = 0.5 uF
	Lo = 0.97 mH	Li = 0.8 mH



4-20mA / Voltage

	Output	Input
	Parameters	Parameters
	Uo = 28 V	Ui = 5.88 V
	Io = 87 mA	li = 0.7 A
Parameters	Po = 0.61 W	Pi = 1.1 W
	Co = 83 nF	Ci = 2.88 uF
	Lo = 4.69 mH	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

HWM-Water Ltd Ty Coch House Llantarnam Park Way Cwmbran NP44 3AW United Kingdom +44 (0)1633 489479 www.hwmglobal.com



MANEX-142-0005-B (ESIB Safety Supplement).docx