

# Intelligens/COMLog™IS Safety Supplement

## MANEX-142-0002

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### Document Control

| Issue | Details   | Author     | Date       |
|-------|---|------------|------------|
| 1     | Draft   | AE         | 28/01/2015 |
| 2     | Update  | AE         | 10/03/2015 |
| 3     | Updated images and addition of Battery exchange   | AE         | 19/03/2015 |
| 4     | Updated option tables   | AE         | 26/03/2015 |
| 5     | Updated input channel table and pictures  | AE         | 13/04/2015 |
| A     | First Release   | AE         | 13/04/2015 |
| B     | General Update  | AE         | 10/06/2015 |
| C     | Updated Address label   | AE         | 13/07/2015 |
| D     | Corrections to part number examples   | AE         | 14/07/2015 |
| E     | Installation bracket grounded to earth warning added. Main label added. General compression and re-distribution of book 1 & 2 content | DRC/A<br>E | 01/09/2015 |
| F     | Update of part number, Modem option   | AE         | 26/10/15   |
| G     | Update to add External Sensor Interface parameters  | AE         | 25/01/16   |
| H     | Modem change to xE910series, addition of EEI power output, update to External Sensor Interface parameters and update of web address   | BB         | 17/10/2017 |
| I     | Addition of External Equipment Power Output   | JRF        | 23/11/2017 |
| J     | Labels changed to support EVE as alternative battery pack supplier. HIS/xxxxx/xx/xxxxxx added to battery pack label to support ISLog. | JRF        | 30/01/2019 |
| K     | Battery pack label updated to support additional products.  | DGC        | 10/11/2020 |

### 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.

# Intelligens/COMLog™IS User Manual 2/2

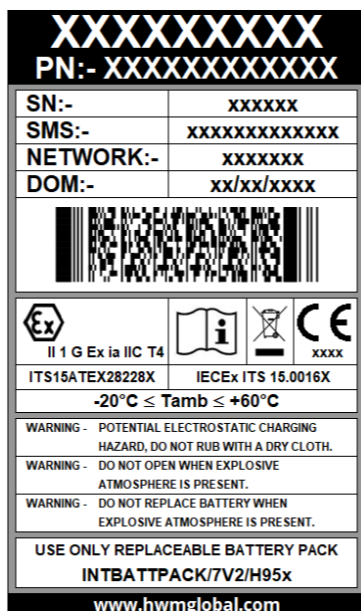
## Safety Supplement - Version 1.7



**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

### Intelligens and COMLog™IS



|  | Output Parameters  | Input Parameters   |
|--|--|--|
| External Power Inputs                    | Uo = 5.4 V<br>Io = 1.1 mA<br>Po = 1.5 mW<br>Co = 1.4 uF<br>Lo = 3.3 uH     | Ui = 12 V<br>Ii = 3.3 A<br>Pi = 12 W<br>Ci = 0<br>Li = 0           |
| Flow/Status Inputs                       | Uo = 5.88 V<br>Io = 1.19 mA<br>Po = 1.76 mW<br>Co = 42 uF<br>Lo = 24 H     | Ci = 50 pF<br>Li = 38 uH   |
| Configuration Interface                  | Uo = 5.88 V<br>Io = 11.88 mA<br>Po = 17.46 mW<br>Co = 42 uF<br>Lo = 249 mH | Ci = 40 pF<br>Li = 1 mH  |
| SonicSens Ultrasonic Level Sensor        | Uo = 5.4 V<br>Io = 16 mA<br>Po = 24 mW<br>Co = 64 uF<br>Lo = 138 mH        | Ui = 7.14 V<br>Ii = 15 mA<br>Pi = 26 mW<br>Ci = 30 pF<br>Li = 1 mH |
| External Equipment Power Output          | Uo = 12 V<br>Io = 430 mA<br>Po = 1.24 W<br>Co = 1.41 uF<br>Lo = 0.15 mH    | Ci = 0<br>Li = 0   |
| GSM Antenna Simple Apparatus             | Uo = 12 V<br>Io = 0.6 uA<br>Po = 7.2 uW<br>Co = 1.4 uF<br>Lo = 95 MH       | Ci = 500 pF<br>Li = 0  |
| Pulse Replication Outputs                | Uo = 5.4 V<br>Io = 1.09 mA<br>Po = 1.61 mW<br>Co = 65 uF<br>Lo = 29 H      | Ui = 24 V<br>Ii = 174 mA<br>Pi = 720 mW<br>Ci = 0<br>Li = 0        |
| PT100 Temperature Probe Simple Apparatus | Uo = 5.88 V<br>Io = 24 mA<br>Po = 36 mW<br>Co = 43 uF<br>Lo = 60 mH        | Ci = 0<br>Li = 1 mH  |
| External Pressure Sensor                 | Uo = 5.88 V<br>Io = 0.68 A<br>Po = 1.1 W<br>Co = 42 uF<br>Lo = 32 uH       | Ci = 40 pF<br>Li = 38 uH   |
| External Sensor Interface                | Uo = 5.88 V<br>Io = 33 mA<br>Po = 49 mW<br>Co = 42 uF<br>Lo = 30 mH        | Ci = 40 pF<br>Li = 38.4 uH   |

Note – Information for this label is duplicated on the front face label

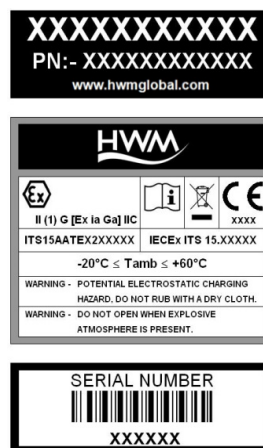
### HWM contact address (Appears on all three parts)



### Battery Pack INTBATTPACK/7V2/H95x 'x' indicates pack variant.



### Serial Communications lead COMMS USB/IS and COMMS-Y USB/IS



| Output Parameters  | Input Parameters |
|--|------------------|
| Um = 250 V<br>Uo = 5.88 V<br>Io = 11.88 mA<br>Po = 17.46 mW<br>Co = 42 uF<br>Lo = 250 mH | Ci = 0<br>Li = 0 |

## Part Number make-up – H95/xxxxxxx/xxxxxx/IS

|                    |   |                |                    |
|--------------------|---|----------------|--------------------|
| <b>H95</b>         | <b>/xxxxxxx</b>                                       | <b>/xxxxxx</b> | <b>/IS</b>         |
| HWM Logger Type No | Antenna, Communications & Input Channel Configuration | Modem opt      | Safety Designation |

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



### Warning:

For the Intelligens or COMLog™IS, the connected intrinsically safe equipment must be certified with Entity Parameters.

Any intrinsically safe equipment intended for connection to the Intelligens or COMLog™IS must have compatible Entity Parameters and be connected and installed as per the manufacturer's instructions.

## Configuration of Intelligens or COMLog™IS

Serial communications is provided via the serial port. Communication to the logger to setup/configure the data logger is via a dedicated Intrinsically Safe Serial Communications lead (**COMMS USB/IS or COMMS-Y USB/IS**) that plugs into a PC USB port.



### Warnings:

- POTENTIAL ELECTROSTATIC CHARGING HAZARD, DO NOT RUB WITH A DRY CLOTH.
- POTENTIAL ELECTROSTATIC CHARGING HAZARD - THE INSTALLATION BRACKET MUST BE APPROPRIATELY CONNECTED TO EARTH IF ATTACHED TO A NON-CONDUCTIVE SURFACE.
- DO NOT OPEN WHEN EXPLOSIVE ATMOSPHERE IS PRESENT.
- DO NOT REPLACE BATTERY WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT.
- ONLY USE SPECIFIED COMMUNICATION CABLE **COMMS USB/IS or COMMS-Y USB/IS**.
- ONLY THE **INTELLIGENS/COMLOG™IS** IS ALLOWED TO BE IN THE HAZARDOUS AREA. IT CAN ALSO BE CONFIGURED IN THE HAZARDOUS AREA, BUT WILL BE VIA THE SPECIFIED COMMUNICATION CABLE WHICH SHALL BE LOCATED WITH THE COMPUTER IN THE NON-HAZARDOUS AREA.
- THE COMPUTER USED TO CONFIGURE THE **INTELLIGENS/COMLOG™IS** IN THE HAZARDOUS AREA MUST NOT BE CONNECTED TO THE MAINS ELECTRICAL SUPPLY OR ANY OTHER EQUIPMENT THAT IS CONNECTED TO A MAINS SUPPLY DURING CONFIGURATION.



### 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.

**Note:** - The GPRS modem fitted has a maximum output of up to ≤2W of RF Power.

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

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