



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

UNIT VERIFICATION

Certificate No.: **IECEX ExTC 21.0016X** Page 1 of 4 [Certificate history:](#)
Status: **Current** Issue No: 0
Date of Issue: 2021-12-15
Applicant: **Hynds Pipe Systems Ltd**
25 Arwen Place
Auckland 2013
New Zealand
Equipment: **Smarterwater Wastewater Manhole Sensor**
Serial number(s) or Unique Identification: **See certificate annex for details**
Type of Protection: **Intrinsic safety 'i'**
Marking: **Ex ic IIB T4 Gc**
Ta: -10 °C to +65 °C


Approved for issue on behalf of the IECEx
Certification Body:

David Price

Position:

Certification Authority

Signature:
(for printed version)


2021-12-15

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

Ex Testing and Certification Pty Ltd
1/30 Kennington Drive
Tomago NSW 2322
Australia



TESTING & CERTIFICATION



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Date of issue: 2021-12-15

Issue No: 0

Manufacturer: **Hynds Pipe Systems Ltd**
25 Arwen Place
Auckland 2013
New Zealand

Additional
manufacturing
locations:

This Unit verification certificate is issued as verification that the Apparatus identified on page 1, was assessed and tested and found to comply with the IEC Standard list below. This certificate is granted subject to the conditions as set out in IECEX Scheme Rules, IECEX 02 and Operational Documents as amended.

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

[IEC 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

[AU/ExTC/ExTR21.0012/00](#)

Quality Assessment Report:

As this is a Unit Verification Certificate, no QAR is applicable as this certificate is specific to the items listed by serial number or other unique identification.



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Date of issue: 2021-12-15

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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The Hynds Smarterwater Wastewater Manhole Sensor is an intrinsically safe water level sensor that uses radar to measure the water level in a manhole.

The equipment has two main parts: an enclosure housing the electronics and batteries and an antenna.

Continued in certificate annex

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The batteries shall not be replaced by the user



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Additional information:

ExTC job 21048

Annex:

[Annex - IECEX_ExTC_21.0016-0.pdf](#)

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Annexe



Annexe for Certificate No.:

IECEX ExTC 21.0016X

Issue No.:

0

Description (continued from certificate body):

The enclosure is an annular shape with a diameter of 160 mm with one flattened side. It is manufactured from a dark red non-metallic material and provides IP67 ingress protection to the internal circuits.

The antenna is a disk of diameter 112 mm with a threaded shaft protruding from the bottom. It is primarily composed of metal with a black non-metallic cover on the top.

The equipment is intended to be mounted to a metallic manhole cover using the shaft of the antenna as a bolt that passes through the centre of the enclosure which is secured by a nut.

The circuits inside the enclosure are connected to the antenna by an SMA connector on the enclosure.

The equipment is powered by two primary cells which are not intended to be replaced by the user or intended to be replaced in the hazardous area.



Equipment Serial Numbers

30 units with the serial numbers listed below are covered by this certificate:

7FECA4	7FED31	7FEE53
7FEE89	7FEFF0	7FF233
7FF273	7FF3B8	82453A
82454E	82457E	82457F
8245C5	824631	824633
824634	824699	824EEE
824F3E	824F64	82505D
825084	8250E9	825155
825168	825170	8251C2
8251C4	8251C7	8251CA

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Annexe



Annexe for Certificate No.:

IECEX ExTC 21.0016X

Issue No.:

0

Drawing list pertaining to Issue 0 of this Certificate:

Manufacturer's Documents				
Title:	Drawing No.:	Pages	Rev. Level:	Date:
SMART COVER WAST (Schematic and PCB layout)	-	10	L	2021-09-23
BOM for PCB_Project Smarter Cover Wast RevL	-	1	B	2021-09-10
Technical Support Sheet - Installation & Maintenance Instructions Smarterwater® Wastewater Manhole Sensor	TSS S1.3IMI	8	3.1	2021-12
Antenna Lid ASM Smart Water (exploded view)	200454	1 of 2	-	2020-11-16
Antenna Lid ASM Smart Water (potting details)	200454	2 of 2	-	2020-11-16
Assembly Smarter Water EX (exploded view)	201079	1	01	2021-04-19
Housing Smarter Water EX	201080	2	01	2021-07-05
Lid Smarter Water EX	201081	2	01	2021-07-05
Cable Cover Smarter Water EX	201083	1	01	2021-07-06
PCBA SMARTER WATER MH EX	201248	1	01	2021-08-17
Label Manhole sensor EX - 50x20mm	201282	1	01	2021-08-17