

1 EU TYPE EXAMINATION CERTIFICATE

Radio Equipment Directive 2014/53/EU – Annex III

3 EU Type Examination

ENW19RED1030 V1

Certificate No.:

4 Equipment: Wireless Optical Smoke Detector with Built-in Voice Annunciator and

Visual Alarm Device.
Model: ARF-WL8-OV

5 Manufacturer: ASI Oy Ltd

6 Address: Laitaatsillantie 3, Savonlinna, 57170, Finland

7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 Element Materials Technology Portland-Evergreen, Inc. (hereafter referred to as Element Materials Technology) Notified Body number 0981 in accordance with Article 26 of the Council Directive 2014/53/EU of 16 April 2014, certifies that this equipment has been found to comply with the Essential Requirements relating to the design and construction of radio equipment given in the following Articles of the Directive:

3.2 - Radio spectrum.

The manufacturer is responsible for additional assessment to all other applicable articles.

The examination and test results are recorded in the confidential report: TRA-045579-45-03C.

9 Compliance with the Essential Requirements, with the exception of those listed in section 19 of the schedule to this certificate, has been assured by compliance with:

EN 300 220-1 V3.1.1

EN 300 220-2 V3.2.1

- This EU-Type Examination certificate relates only to the design and construction of the specified equipment in accordance with Directive 2014/53/EU. Further requirements of this Directive apply to the manufacture and supply of this equipment. These are not covered by this certificate.
- 11 This certificate and its schedules may only be reproduced in its entirety and without change. This certificate is issued in accordance with the rules of the Element Materials Technology Radio Certification Scheme and remains valid for only so long as the equipment conforms to the type described herein.
- Any deviation to the design and construction of the specified equipment that is not certified by Element Materials Technology shall render this certificate invalid.

P. Thompson, Senior Certification Engineer Signed for and on behalf of Element

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13 SCHEDULE TO EU TYPE EXAMINATION CERTIFICATE

14 ENW19RED1030 V1

15 General description of equipment or protective system included within the scope of this certificate

ARG-WL8-OV is a wireless 3-in-1 device equipped with an optical smoke detector and a voice annunciator and visual alarm device (VAD).

16 Technical description

Frequency bands: 866 MHz – 869.85 MHz

Transmit power:

Channel spacing:

Outy cycle:

3.1 mW ERP

600 kHz

< 0.003 %

Type of modulation: GFSK BT=0.5, 100kb/s, deviation 50 kHz

Type of antenna and gain: Embedded Whip λ/4 Antenna, Declared Gain: 3 dBi

Firmware version: 11.0 & 14.0

17 Technical Documents describing the certified equipment

The list of technical documents is given in Appendix A to this schedule.

18 Test report No. (associated with this certificate issue): TRA-045579-45-03B

19 Essential Requirements (Directive Article 3)

Covered by application of the standards listed in section 9 of this certificate and the assessment conducted in the test report/s listed in section 8 of this certificate.

20 "Restrictions on Use", if any:

None.

21 "Routine tests", if any:

None.

22 Other information, if any:

The final firmware version is 15.0. No testing was performed on this version.

The spurious response rejection test was performed on version 14.0, while all other tests were performed on version 11.0. The full firmware history and the modification details are listed below.

Version 15.0

 If the amplitude and phase adjusted and stored in the external ROM after EOL they are loaded into the transceiver.

Version 14.0

- Improved Image Rejection calibration algorithm (Errata SX1232)
- Changed the PLL registers for Image rejection. Made them different for TX and RX.
- Initialization of the transceiver after the switch-on indication.
- The table of frequencies is located in the program memory at the following address: (Russian 0x200, Europe 0x300).
- Improved protection against unauthorized firmware copying.

Version 13.0

• Parameter in the firmware was changed. Duration of LED flash is increased to 200 ms.

Version 12.0

• Dust compensating algorithm now is not implemented within 1 hour after receiving of "Reset Fire and Faults" command.

Version 11.0

Version sent to approvals

23 Photographs













24 Details of markings

Product Label:



Packaging Label: Individual



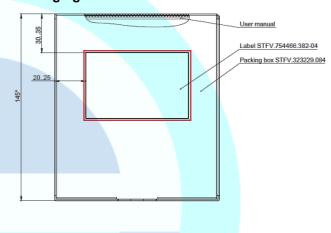
Packaging Label: Group



Product Label Location



Packaging Label Location



25 Details of variations to this certificate

This certificate is a consolidated certificate and reflects the latest status of the certification, including the following variations:

- Original 2019-12-18 ASIQ-0004.
- Variation V1 Model number reference prefix to change from ARG to ARF reference. Ownership to be transferred from Argus Spectrum International to ASI Oy Ltd with immediate effect. Address to change from Argus Spectrum International, Serdobolskaya Sreet 65A, St Petersburg, 197342, Russian Federation to ASI Oy Ltd, Laitaatsillantie 3, Savonlinna, 57170, Finland.

26 Notes to CE marking

In respect of CE Marking, Element Materials Technology accepts no responsibility for the compliance of the equipment against all applicable Directives in all applications.

27 Notes to this certificate

Element Materials Technology certification reference: TRA-065843-01 Li 17 (GS-ASIQ-0015).

Throughout this certificate, the date format yyyy-mm-dd (year-month-day) is used.

Notified Body 0981 is the designation for Element Materials Technology, Portland-Evergreen Inc..

This certificate is a consolidated certificate and reflects the latest status of the certification, including all variations.

28 Conditions for the validity of this certificate

This certificate remains valid for 18 months after the date of issue so long as:

- (i) The equipment listed in section 4 is manufactured in accordance with the technical documents listed in Appendix A of this certificate.
- (ii) The standards listed in section 9 of this certificate continue to satisfy the Essential Requirements relating to the design and construction of radio equipment given in the Articles of the Directive listed in section 8 of this certificate and the generally acknowledged state of the art (e.g. as determined by the publishers of those standards).

APPENDIX A - LIST OF TECHNICAL DOCUMENTS

Title:	Document/file name:	Rev. Level:	Issue date:
Technical file	RED TDF attestation_documentation summary_ARF-WL8-OV - 14399	5	2025-01-31

