EU DECLARATION OF CONFORMITY

in accordance with Regulation (EC) No 765/2008 and Decision No 768/2008/EC

Document No.: DoC-OTT-R1-V1.0

1. Manufacturer

Company name	ISYSTEMS AUTOMATION S.R.L.
Trading as	HomeMaster®
Registered office (sediul social)	Str. Domnişori, Nr. 81, Bl. 62, Scara A, Etaj 3, Ap. 12, 100284 Ploieşti, Jud. Prahova, Romania
Office / Contact address	Diligentei 18, Ploieşti, Romania
CUI / VAT	RO 21537032
EUID / Trade Registry	ROONRC.J2007000919293
EU Trade Mark	HOMEMASTER — EUTM No. 019082911 (EUIPO, registered 15/01/2025)
Telephone	+40 747 757 798
Website	https://www.home-master.eu

2. Object of the Declaration

Product name	HomeMaster Thermostat for OpenTherm
Part number	OTT-R1
Hardware version	V1.0
Firmware version	1.0.0 onwards
Cybersecurity conformity (Art. 3(3)(d)) from firmware	1.0.0 onwards (applies to later versions that do not alter the assessed security mechanisms)
Description	ESP32-based wall-mounted room thermostat acting as an OpenTherm master for compatible boilers, with a 2.8″ colour display, rotary encoder and four keys, a 24 GHz presence radar, on-board temperature, humidity and ambient-light sensors, USB-C and Wi-Fi 2.4 GHz connectivity.
Power input	24 V DC nominal (SELV)
Radio modules	Pre-certified ESP32 Wi-Fi 2.4 GHz / Bluetooth module; HLK-LD2410C 24 GHz presence radar module
Enclosure	Italtronic EYE BOX, ABS, wall mounted

3. Statement of Responsibility

This Declaration of Conformity is issued under the sole responsibility of the manufacturer named above. The object of the declaration described above is in conformity with the relevant Union harmonisation legislation listed below.

4. Applicable Union Harmonisation Legislation

Directive / Regulation	Subject
Directive 2014/53/EU (RED)	Radio Equipment Directive
Directive 2011/65/EU and (EU) 2015/863 (RoHS)	Restriction of Hazardous Substances

> **Note on the EMC and Low Voltage Directives.** This product is radio equipment. Under Article 2(2)(a) of Directive 2014/30/EU and Article 1(2)(f) of Directive 2014/35/EU, radio equipment within the scope of Directive 2014/53/EU is excluded from both. The corresponding essential requirements are satisfied through Article 3.1(b) (electromagnetic compatibility) and Article 3.1(a) (health and safety, including the objectives of the Low Voltage Directive without a

lower voltage limit) of the RED. The product is supplied from 24 V DC SELV only and carries no mains circuit.

5. Harmonised Standards Applied

Conformity with the legislation listed in Section 4 has been demonstrated through the application of the following harmonised standards:

Area	Standards
Health and safety — RED Art. 3.1(a)	EN IEC 62368-1:2020 + A11:2020
RF exposure — RED Art. 3.1(a)	EN 62479:2010 (low-power exemption assessment)
EMC — RED Art. 3.1(b), general	EN 301 489-1 V2.2.3
EMC — RED Art. 3.1(b), wideband data	EN 301 489-17 V3.2.4
EMC — RED Art. 3.1(b), short-range devices	EN 301 489-3 V2.3.2
Radio spectrum — RED Art. 3.2, 2.4 GHz	EN 300 328 V2.2.2
Radio spectrum — RED Art. 3.2, 24 GHz SRD	EN 300 440 V2.2.1
Cybersecurity — RED Art. 3(3)(d)	EN 18031-1:2024
RoHS technical documentation	EN IEC 63000

6. Radio Modules

The product integrates two pre-certified radio modules.

6.1 Wi-Fi / Bluetooth, 2.4 GHz

Module model	ESP32-WROOM-32U-N16
Module manufacturer	Espressif Systems (Shanghai) Co., Ltd.
EU Type-Examination certificate (Module B)	No. 172141367/AA/02, issued 02 March 2023
Issued by (Notified Body)	Kiwa Nederland B.V. (NB 0063), Wilmersdorf 50, 7327 AC Apeldoorn, The Netherlands
Frequency band	2.4 GHz ISM, 2402–2480 MHz
Maximum radiated power	≤ 20 dBm EIRP
Radio standards covered	EN 300 328 V2.2.2 · EN 301 489-1 V2.2.3 · EN 301 489-17 V3.2.4

A copy of Espressif's CE certification document for ESP32-WROOM-32U is held in the technical file maintained by ISYSTEMS AUTOMATION S.R.L.

6.2 Presence radar, 24 GHz

Module model	HLK-LD2410C
Module manufacturer	Shenzhen Hi-Link Electronic Co., Ltd.
Occupied frequency band, measured	24 155.36 – 24 244.97 MHz (occupied bandwidth 84.7 MHz)
Maximum radiated power, measured	−5.70 dBm e.i.r.p. (limit 20 dBm, margin 25.7 dB)
Supplier Declaration of Conformity	Shenzhen Hi-Link Electronic Co., Ltd., 09/11/2026, covering HLK-LD2410C and HLK-LD2410C-P
Verification of Conformity	No. LGT25B077C01, 06/03/2025, Shenzhen LGT Test Service Co., Ltd.
Radio spectrum test report	LGT25B077RF03, EN 300 440 V2.2.1, issued 03/03/2025 — PASS
EMC test report	LGT25B077EM01, EN 301 489-1 / -3 / -17 — PASS
RF exposure test report	LGT25B077HA01, EN 50663:2017 — PASS
Safety test report	LGT25B077SA01, EN IEC 62368-1:2020+A11:2020 — PASS

Testing performed at	Bay Area Compliance Laboratories Corp. (Dongguan), No. 12 Pulong East 1st Road, Tangxia Town, Dongguan, Guangdong, China

The module's band lies entirely within the 24.05–24.25 GHz radiodetermination allocation of ERC/REC 70-03 Annex 6, and within entry 11 of EN 300 440 clause 4.2.2.4 (24.00–24.25 GHz, 100 mW e.i.r.p.).

Copies of all of the above are held in the technical file.

7. Conformity Assessment Procedure

For the radio-equipment aspects of the Wi-Fi function, conformity is supported by the EU type-examination of the integrated module (Module B), carried out by Kiwa Nederland B.V. (Notified Body No. 0063), certificate No. 172141367/AA/02.

For all other aspects — Article 3.1(a), Article 3.1(b), Article 3.2 as it applies to the 24 GHz radar, Article 3(3)(d), and RoHS — the conformity assessment is carried out by the manufacturer using the internal production control procedure (Module A, Annex II of Directive 2014/53/EU).

Compliance with Article 3(3)(d) of Directive 2014/53/EU, applicable since 1 August 2025 under Delegated Regulation (EU) 2022/30, is established at product level by the manufacturer under Module A, applying EN 18031-1:2024. Article 3(3)(e) is not declared: whether the data processed by the product falls within its scope is under legal assessment. Article 3(3)(f) does not apply.

8. Supporting Assessments and Records

Technical documentation supporting this declaration is held by ISYSTEMS AUTOMATION S.R.L. at the address listed in Section 1 and is available to the relevant authorities on request. The technical file is **TF-OTT-R1-V1.0**.

Essential requirement	Supporting record
Art. 3.1(a) — health and safety	**SAFETY-OTT-R1-2026-001**, Revision 1.0
Art. 3.1(a) — RF exposure	**RFE-OTT-R1-2026-001**
Art. 3.1(b) — electromagnetic compatibility	**EMC-OTT-R1-2026-001**
Art. 3(3)(d) — cybersecurity, risk assessment	**CYB-001**, EN 18031-1 assessment for OTT-R1
Art. 3(3)(d) — cybersecurity, verification	**CYB-002**, test protocol for OTT-R1
RoHS — EN IEC 63000 documentation	**RoHS-001**, EN 63000 material declaration matrix for OTT-R1

All six are internal records of ISYSTEMS AUTOMATION S.R.L., produced under the internal production control procedure (Module A).

EMC. Report EMC-OTT-R1-2026-001 covers radiated emissions, RF field, conducted RF, EFT/burst and ESD immunity per EN 301 489-1 with parts -3 and -17. The mains-port tests of the gateway's programme do not apply — this product has no mains circuit. The module-level reports listed in Section 6 support, but do not replace, the assessment of the finished product.

Safety. Report SAFETY-OTT-R1-2026-001 classifies the product as Class III equipment containing only ES1 electrical energy sources, with no mains circuit and no insulation barrier, drawing a maximum of 2.4 W and therefore classified PS1. No accessible surface shows a detectable temperature rise above ambient. Reverse-polarity protection was verified. The dielectric-withstand programme applied to the gateway does not apply here — there is no insulation barrier to test.

RF exposure. The radar is covered by the module's own EN 50663 report (LGT25B077HA01) — at −5.7 dBm e.i.r.p. it is far below any exemption threshold. The Wi-Fi section is addressed by the EN 62479 low-power exemption calculation recorded in RFE-OTT-R1-2026-001.

Cybersecurity. CYB-001 records the EN 18031-1 risk assessment. CYB-002 records the verification, including the two checks that govern this product: clause 6.1, that the provisioning window closes on its own, and clause 6.6, that no fallback access point is raised when the configured network cannot be reached. Both were performed on a programmed sample and both passed.

This declaration applies to all units of the product described in Section 2 placed on the market with hardware version V1.0 and remains valid as long as the product is manufactured without significant modification.

9. Signed for and on behalf of the Manufacturer

Place of issue: Ploiești, Romania

Date of issue: 12.11.2026

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Name: Daniela Drezyulya

Position: Director

Signature: 

HomeMaster® is a registered European Union trademark (EUTM No. 019082911) of ISYSTEMS AUTOMATION S.R.L., registered with EUIPO on 15 January 2025. OpenTherm® is a registered trademark of the OpenTherm Association. All other trademarks are the property of their respective owners.

End of Declaration