

EU DECLARATION OF CONFORMITY

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

Document No.: DoC-OTGW-R1-V1.2

1. Manufacturer

Company name	ISYSTEMS AUTOMATION S.R.L.
Trading as	HomeMaster®
Registered office (sediul social)	Str. Domnișori, Nr. 81, Bl. 62, Scara A, Etaj 3, Ap. 12, 100284 Ploiești, Jud. Prahova, Romania
Office / Contact address	Diligentei 18, Ploiești, 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 OpenTherm Gateway
Part number	OpenTherm Gateway-R1
Hardware version	V1.0
Cybersecurity conformity (Art. 3(3)(d)) from firmware	1.2.0 onwards (applies to later versions that do not alter the assessed security mechanisms)
Description	ESP32-based DIN-rail automation controller providing an OpenTherm interface for compatible boilers, one SPDT relay output, two 1-Wire temperature inputs, USB-C and Wi-Fi 2.4 GHz connectivity.
Power input	24 V DC nominal · 85–265 V AC, 47–63 Hz
Radio module	Pre-certified ESP32 Wi-Fi 2.4 GHz

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 2014/30/EU (EMC)	Electromagnetic Compatibility

Directive 2014/35/EU (LVD)	Low Voltage Directive
Directive 2014/53/EU (RED)	Radio Equipment Directive
Directive 2011/65/EU (RoHS)	Restriction of Hazardous Substances

5. Harmonised Standards Applied

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

Area	Standards
EMC – Emissions (Class B)	EN 55032:2015 + AC:2016-07 + A11:2020 + A1:2020
EMC – Immunity	EN 55035:2017 + A11:2020
Electrical Safety	EN 62368-1
Radio (2.4 GHz)	EN 300 328 V2.2.2 (via integrated module — see Section 6)
Radio – EMC (general)	EN 301 489-1 V2.2.3 (via integrated module — see Section 6)
Radio – EMC (wideband)	EN 301 489-17 V3.2.4 (via integrated module — see Section 6)
Cybersecurity (RED 3(3)(d))	EN 18031-1:2024
RoHS technical documentation	EN IEC 63000

6. Radio Module

The product integrates a pre-certified Wi-Fi 2.4 GHz radio module. Conformity with the radio-specific essential requirements of Directive 2014/53/EU (RED) — Articles 3.1(b) and 3.2 — is inherited from the module's EU type-examination, listed below. The complete product is operated within the conditions of use defined in the module's certification.

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 (internal production control), applying EN 18031-1:2024. The cybersecurity risk assessment (CYB-001) and the verification records (CYB-002) are held in the technical file. 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.

Module model	ESP32-WROOM-32U-N16
Module manufacturer	Espressif Systems (Shanghai) Co., Ltd.
Module type-exam 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
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.

7. Notified Body

For the radio-equipment aspects of the product, conformity is supported by the EU type-examination of the integrated radio module (Module B), carried out by Kiwa Nederland B.V. (Notified Body No. 0063), certificate No. 172141367/AA/02. For all other aspects (EMC, LVD, RoHS), the conformity assessment was carried out by the manufacturer using the internal production control procedure (Module A) of the applicable directives.

8. Additional Information

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.

LVD (electrical safety) conformity is supported by in-house test report LVD-OTGW-R1-2026-001 issued by ISYSTEMS AUTOMATION S.R.L. internal compliance laboratory. Tests performed in accordance with EN 62368-1:2020 + A11:2020 using calibrated equipment (GW Instek GPT-9804 AC/DC withstanding-voltage and insulation-resistance tester, calibrated K-type thermometer, calibrated digital multimeter, calibrated digital caliper, variable AC transformer 0–300 V AC with calibrated voltage measurement). Reported isolation tests: 4 of 5 barriers PASS at Reinforced level (4243 V DC, 60 s, $\geq 7 \text{ M}\Omega \text{ IR}$) — Mains ↔ SELV, Relay ↔ SELV, Mains ↔ Foil, Relay ↔ Foil — measured $>9999 \text{ M}\Omega \text{ IR}$ and max 0.03 mA leakage. The 5th barrier (Mains primary ↔ Relay output) is classified as Basic insulation with declared use restriction (PCB clearance L/N ↔ relay tracks below 3 mm in HW V1.0 REV1; relay output must be connected only to the same mains supply as L/N input or to SELV/LPS circuits per the user manual, datasheet and product label). This 5th barrier was tested at 2121 V DC (Basic level, 60 s, $\geq 2 \text{ M}\Omega \text{ IR}$) and PASS at 0.02 mA leakage and $>9999 \text{ M}\Omega \text{ IR}$. The use restriction will be lifted in HW V1.0 REV2 by PCB layout fix (1.5×6 mm slot between L/N and relay tracks) which will allow Reinforced classification across all barriers. Type-test sample is retained as reference unit and is excluded from series production. The LVD test programme under EN 62368-1 is concluded and recorded in the test report identified above, issued at revision 1.0 on 25.07.2026. Touch current (clause 5.7), temperature rise (clause 9) and single-fault testing (Annex B.4) returned a PASS verdict. PCB creepage and clearance verification (Tables 11/14) identified non-conformities on three insulation paths in HW V1.0 REV1; these are recorded in section 22 of that report together with the corrective action scheduled for REV2.

EMC conformity is supported by test report Job #1648, issued 20 April 2026 by Idvorsky Laboratories Ltd. (Volgina 15, 11060 Belgrade, Serbia). Tests performed: conducted and radiated RF emissions (EN 55032:2015, Class B); RF field, conducted RF, EFT/burst and ESD immunity (EN 55035:2017, supported by EN IEC 61000-4-3:2020, EN IEC 61000-4-6:2023, EN 61000-4-4:2012, EN 61000-4-2:2009). Verdict: PASS.

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: 25.07.2026



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. All other trademarks are the property of their respective owners.

End of Declaration