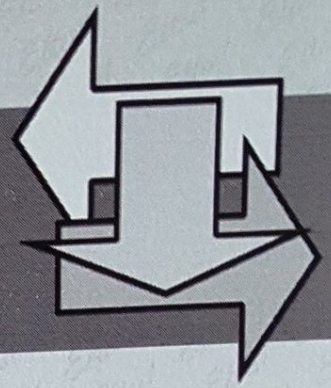


Certificate

for EU survey of type



CE
2024

Document Number: **016 / 25.08.2017**
Applicant: Pro Smart Ltd.
Address: 78 Maestro Kanev str.
1618 Sofia, Bulgaria
Manufacturer: Pro Smart Ltd.
Address: 78 Maestro Kanev str.
1618 Sofia, Bulgaria

Product
Description:

Wi-Fi programmable thermostat controller

Models:

- BBoil**
- Configuration 1 **BBoil RF**
 - Configuration 2 **BBoil Classic**

Trademark:
Applied

proSmart

Specifications:

EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013
EN 301 489-1 V2.1.1:2017; EN 301 489-17 V3.1.1:2017
EN 55022:2010; EN 55024:2010; EN 300 328 V2.1.1:2017

With this certificate **ELTEST CERTIFICATION Ltd.** certifies that the technical design described radio equipment satisfies the relevant essential requirements of Directive 2014/53/EU, after administration of:

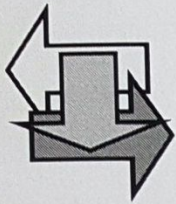
Module B: EU type examination - Annex III of Directive 2014/53/EU

Certificate loses its validity in case the conditions under which it was issued.
An integral part of this certificate is contained Annex four pages

ELTEST CERTIFICATION Ltd. - Varna is a European Notified Body Identification № NB 2024, holding a license № 119 - OC / 25.07.2016 issued by the State Agency for Metrology and Technical Surveillance.

Varna, Bulgaria
25.08.2017

eng. Vladimir Todorov
Head of Notified Body



"ELTEST CERTIFICATION" Ltd.

BULGARIA, Varna 9002, 7 Voynishka Str.

fax: +359 52 721 198, e-mail: office@eltestcertification.com

License number 119 – OC / 25.07.2016 issued by SAMTS



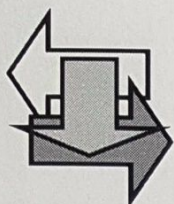
RED

NB 2024

Application to
CERTIFICATE № 016 / 25.08.2017

I. Compliance of radio equipment with the essential requirements established after review and assessment of the technical design following attached documents:

Directive 2014/53/EC	Harmonised standards	Documentary evidence
Art. 3.1.a)	EN 60950-1:2006+A11:2009+A1: 2010+A12:2011+A2:2013 EN 60730-1:2011 EN 60730-2-9:2010 EN 50491-1:2014 EN 50491-3:2009	Test reports - "ELPROM - ILEP" Ltd., Sofia ref. № 17.0018/02.044 from 27.06.2017, 29 sheets; Test reports - "ELPROM - ILEP" Ltd., Sofia ref. № 17.0018/02.045 from 27.06.2017, 35 sheets; Test reports - "ELPROM - ILEP" Ltd., Sofia ref. № 17.0018/02.046 from 27.06.2017, 15 sheets;
Art. 3.1.b)	EN 301 489-1 V2.1.1:2017 EN 301 489-17 V3.1.1:2017 BDS EN 55022:2010 BDS EN 55022:2010 BDS EN 61000-3-2:2014 BDS EN 61000-3-3:2013 BDS EN 55024:2010 BDS EN 61000-4-2:2009 BDS EN 61000-4-4:2012 BDS EN 61000-4-5:2014 BDS EN 61000-4-6:2014 BDS EN 61000-4-11:2006 BDS EN 55022:2010 BDS EN 55016-2-3:2010+A1:2010 BDS EN 61000-4-3:2006+A1:2008 +A2:2010	ESP-WROOM-02 Wi-Fi TIMCO ENGINEERING NB 1177 Certificate number: TCF-672CC17 Test reports - BIM - AIL EMC with outgoing. № 1053 from 28.07.2017, 21 sheets; Test reports - BIM - IL EMC with outgoing. № 1053A of 28.07.2017, 14 sheets.
Art. 3.2	EN 300 328 V2.1.1:2017	ESP-WROOM-02 Wi-Fi TIMCO ENGINEERING NB 1177 Certificate number: TCF-672CC17
Art. 3.3.a) to art. 3.3.i)	-	-



II. Description of radio equipment:

Wi-Fi programmable thermostat controller. The device is an internet connected relayed module, which could be programmed and controlled via an internet connected computer or a smartphone /mobile device/. It is suitable for building and home installations. The wireless temperature sensor communicates directly with BBoil, sending real time information regarding the recorded temperature in the premises, where it is installed. Using the received data, BBoil controls the heating and/or cooling installation, maintaining the previously set values. Wi-Fi programmable thermostat controller is in Configuration 1 and Configuration 2.

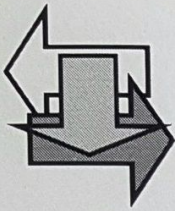
The design of the BBoil controller includes the following modules:

- controller box GAINTA INDUSTRIES D3MG 90,2x53,3x57,5mm PC/ABS thick.
- electronic circuit Controller BBoil proSmart RF1 with
 - PCB KINGBOARD LAMINATES KB[®] B-6160A FR-4.0 KB 1,55mm thick. UL 94 V-0 CTI 175V UL E123995
 - fuse FF1 Multicomp MCMET T 250mA 250V 35A -55 to +125°C VDE
 - AC-DC converter MI Vigortronix VTX-214-001-105 INPUT: 100-240V~ 50/60Hz OUTPUT: 5V--- 0,2A rated to 3600Vrms/1min -25 to +70°C EN 60950-1, EN 61558-2-6
 - relay REL1 TE connectivity OMIH-SS-105LM Coil: 5V--- Contacts: 16(4)A 240V~ 100x10³ operations -30 to +60°C rated to 5000Vrms/1min VDE 40005414, SEMKO 903200, UL E58304
 - voltage regulator U2 National Semiconductor LM1117MPX-ADJ 20V 1,25V to+13,8V 800mA 0°C to +125°C
 - Wi-Fi модуль M2 ESPRESSIF SYSTEMS ESP-WROOM-02 Wi-Fi 802.11b/g/n 32bit MCU 10bit ADC 2,5-3,6V 80mA 170mAmax 2,4-2,5GHz, TIMCO Engineering - NB 1177
 - transceiver D2 HOPERF ELECTRONIC RFM69W 315, 433, 868, 915MHz 1,8V to 3,6V 16mA 45mAmax 300kb/s -40°C to +85°C
 - terminals CON1 Ulo Group EG500V-5.0-02P-14 2-pole 2,5mm² 18A 250V
 - terminals CON2 Ulo Group EG128V-5.0-03P-14 3-pole 2,5mm² 18A 250V

The equipment is intended to be connected to an AC mains supply, and it is designed for Overvoltage Category II and transient voltages up to and including 2500V.

Configuration 1 with wireless digital temperature sensor - BBoil RF

- enclosure of temperature VERSALIS Polystyrene EDISTIR[®] R 850E thick. 2,3mm min GWT 650°C CTI 500V
- electronic circuit Wireless Temperature Sensor proSmart WS1 with
 - PCB KINGBOARD LAMINATES KB[®] B-6160A FR-4.0 KB 1,55mm thick. UL 94 V-0 CTI 175V UL E123995
 - resettable fuse (PTC) F1 BOURNS[®] MF-MSMF030 I_H 0,30A I_T 0,60A I_{MAX} 10A 30,0Vmax. 0,8W 0,30-3,00Ω -40°C to +85°C
 - microcontroller D2 ATMEL[®] ATmega328-AUR 32KBytes Flash Memory 1 KBytes EEPROM 2Kbytes SRAM 20MHz
 - transceiver D1 HOPERF ELECTRONIC RFM69W 315, 433, 868, 915MHz
 - digital thermometer D5 Maxim integrated™ DS18B20 -55°C to +125°C ±0,5°C of -10°C to +85°C 3,0V to 5,5V 4,0mA
 - AA size battery holder KEYSTONE 2474 Polypropylene connector 9V type

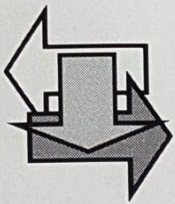


Configuration 2 conventional cord connected temperature sensor for model - BBoil Classic:

- enclosure of temperature VERSALIS Polystyrene EDISTIR® R 850E thick. 2,3mm min GWT 650°C CTI 500V
- cord LIYY / 3x0.14-2- TEHNOKABEL PVC -40°C to +80°C 300V
- connector CviLux CI31 Series 2.54mm (.100”) Wire to Board Connectors
- digital thermometer D5 Maxim integrated™ DS18B20 -55°C to +125°C ±0,5°C of -10°C to +85°C 3,0V to 5,5V 4,0mA

III. Application documentation:

1. Technical specification
2. Safety instructions
3. Installation and setup instructions
4. Structural and technological documentation:
 - Controller – specification, drawing together, circuit diagram
 - Wireless digital temperature sensor - specification, drawing assembly, circuit diagram
 - Conventional temperature sensor with cable connection - specification
5. Product Tag
6. Protocols, opinions for conformity assessment of a Wi-Fi module under Directive 2014/53/EU, NB 1177
7. Declaration of Conformity for RFM69W, RF transceiver under Directive 2014/53/EC
8. Low Voltage Test Reports
9. Test reports for electromagnetic compatibility



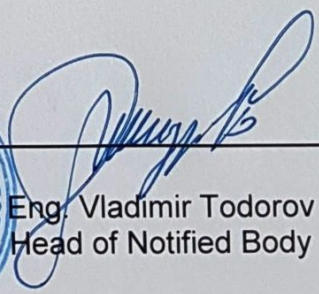
IV. Terms of the certificate:

- This certificate applies only to assess the adequacy of the technical design of the radio equipment through examination of the technical documentation and supporting evidence to that radio equipment.
- The manufacturer shall keep available to the competent authorities a copy of the EU-type examination, its applications with the technical documentation for 10 years after placing the equipment on the market.
- The manufacturer is obliged to inform ELTE Certification Ltd for any changes to the approved type.
- This certificate remains valid provided that the construction and testing of specified radio equipment as well as the requirements laid down in harmonized European standards or other technical specifications used for estimating the type remain unchanged.
- The manufacturer affixes the CE marking and draw up a declaration of conformity after applying Module C: Conformity to type based on internal production control - Annex № 1 to Art. 14 Section III of the Regulation (Annex III of Directive 2014/53 / EU).

Directive 2014/53/EU	
ESSENTIAL REQUIREMENTS	
Directive 2014/53 / EU	
Art. 3.1.A)	Health and safety
Art. 3.1.B)	Electromagnetic compatibility
Art. 3.2	Spectrum
Art. 3.3. a) to art. 3.3. i)	Additional requirements

Varna, Bulgaria
25.08.2017




Eng. Vladimir Todorov
Head of Notified Body