

Notified Body
TÜV Rheinland
LGA Products GmbH

Tillystraße 2
90431 Nürnberg
notified by the



Bundesnetzagentur für Elektrizität, Gas,
Telekommunikation, Post und Eisenbahnen
under No. 0197

herewith issues an
EU-Type Examination Certificate

within the meaning of Annex III Module B of the 2014/53/EU Radio Equipment Directive (RED)
for compliance with the essential requirements of this directive

Registration Number: RT 60161836 0001
Evaluation Report Nr.: CN20HIGO 003

Manufacturer: F. Robotics Acquisitions Ltd.
Hatzabar St. Industrial Zone
4281500 Pardesiya
Israel

Product: Radio Equipment
(Robotic Lawn Mower with Base Station)

Type Identification: Robotic Mower: RK1000 RK2000 RK1000 Pro RK2000 Pro
RK3000 Pro RK4000 Pro (Robomow)
XR5 1000 XR5 2000 XR5 3000 XR5 4000 (Cub Cadet)
Base Station: KBS-01
(Robomow, Cub Cadet)

Essential requirements: Article 3.2 Radio spectrum

The technical design of the assessed type has been verified based on the technical documentation presented by the manufacturer according to Annex III Module B of the Directive. As far as the essential requirements indicated, the Notified Body of TÜV Rheinland LGA Products GmbH confirms, that the technical design of the apparatus meets the essential requirements of the Directive 2014/53/EU Article 3.

This certificate consists of this page and Annex I.
Validity of the certificate is specified in the Annex I.

Date 25.02.2022



Notified Body


S. Peng

Equipment

- Product** : Robotic Lawn Mower with Base Station
Trademark : Robomow, Cub Cadet
Identification : Robotic Mower:
RK1000, RK2000, RK1000 Pro, RK2000 Pro, RK3000 Pro, RK4000 Pro (Robomow)
XR5 1000, XR5 2000, XR5 3000, XR5 4000 (Cub Cadet)
Base Station: KBS-01
Product description : It is robotic lawn mower with GPS, Bluetooth low energy and GSM function.

System description

- Frequency band(s) of operation** : E-GSM 900, DCS 1800, LTE 1, LTE 3, LTE 8, LTE 20, LTE 28, 2400-2483.5 MHz, 100 Hz – 148.5 kHz, GNSS band 1559 to 1610 MHz
Operating frequency : E-GSM 900: Uplink: 880-915MHz, Downlink: 925-960MHz
DCS 1800: Uplink: 1710-1785MHz, Downlink: 1805-1880MHz
E-UTRA Band 1:
Transmitter 1920.1 ~ 1979.9 MHz / Receiver 2110.1 ~ 2169.9 MHz
E-UTRA Band 3:
Transmitter 1710.1 ~ 1784.9 MHz / Receiver 1805.1 ~ 1879.9 MHz
E-UTRA Band 8:
Transmitter 880.1 ~ 914.9 MHz / Receiver 925.1 ~ 959.9 MHz
E-UTRA Band 20:
Transmitter 832.1 ~ 861.9 MHz / Receiver 791.1 ~ 820.9 MHz
E-UTRA Band 28:
Transmitter 703.1 ~ 747.9 MHz / Receiver 758.1 ~ 802.9 MHz
GNSS (receiver):
1575.42 MHz, 1561.098 MHz, 1598.0625 ~ 1605.375 MHz
Bluetooth: 2402 MHz to 2480 MHz
RMI: 3 – 8 kHz
Channel spacing / bandwidth : 200 kHz, 2 MHz, 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz
RF output power : Robotic Mower:
E-GSM 900: 32.5 dBm ±1 dB (except for RK1000 and RK2000)
DCS1800: 29.5 dBm ±1 dB (except for RK1000 and RK2000)
eMTC: 23 dBm ±2dB (except for RK1000 and RK2000)
Bluetooth (LE): < 6 dBm (max. e.i.r.p.)
RMI: 73.2 dBuA/m @ 10m (Max. H-field)
Base Station:
Bluetooth (LE): < 6 dBm (max. e.i.r.p.)
Type of modulation : GMSK, 8PSK, GFSK, QPSK, 16QAM
Type of antenna : Integral Antenna
Mode of operation (simplex / duplex) : GSM/LTE/Bluetooth: Duplex
RMI: Simplex
Duty cycle (access protocol, if applicable) : Max. up to 100%
Hardware version : Mower:
625-09001B (RK1000, RK2000, XR5 1000 and XR5 2000 platform)
625-08953 (RK3000, RK4000, XR5 3000 and XR5 4000 platform)
GSM/LTE/GPS: 625-08904-04
Base Station: 625-07450A-01
Software version : Mower:
C2.56_M201.65 (RK1000, RK2000, XR5 1000 and XR5 2000 platform)
C2.56_M201.66 (RK3000, RK4000, XR5 3000 and XR5 4000 platform)
BLE: 20
GSM/LTE/GPS:
37.00.213-POC.210003
MOC.200002
POC.210003
AOC.210000
Base Station: 20

Documentation

User information and installation instructions	<input checked="" type="checkbox"/>
Block diagram	<input checked="" type="checkbox"/>
Circuit diagram	<input checked="" type="checkbox"/>
Part list	<input checked="" type="checkbox"/>
PCB layout	<input checked="" type="checkbox"/>
Photo documentation	<input checked="" type="checkbox"/>
Versions of firmware/software used	<input checked="" type="checkbox"/>
Statement of compliance with art. 10.2 it can be operated in at least one Member State without infringing applicable requirements on the use of radio spectrum.	<input checked="" type="checkbox"/>
Risk Analysis	<input checked="" type="checkbox"/>

Conformity Assessment

Applied harmonised standards (Referred to the publication of harmonised standards in the official Journal of the EU at the time of issuance)			
Article	Standard	Test Report No.	Issued by
3.2 Radio:	EN 301 511 V12.5.1 EN 301 908-1 V13.1.1 EN 301 908-13 V13.1.1 EN 303 413 V1.1.1 EN 300 328 V2.2.2	DE2195AK 002 DE21HOU7 001 DE222R4Y 001 DE21Q3H4 001 DE22BN96 003 DE21Q5GU 002 DE227PZH 001 DE214IY8 001 DE21UZC8 001 DE22NY6B 001 DE21LMFH 001 60421195-001	TÜV Rheinland LGA Products GmbH

Applied non-harmonised standards			
Article	Standard	Test Report No.	Issued by
3.2 Radio:	Draft EN 303 447 V1.2.0	DE21C09F 001 60416958-002	TÜV Rheinland LGA Products GmbH

Rationale for applied non-harmonised standards or other solutions:

- EN 303 447 Short Range Devices (SRD); Inductive loop systems for robotic mowers; Harmonised Standard for access to radio spectrum

Remarks:

- This Type Examination Certificate does not imply assessment of the production of the product and does not permit the use of a TÜV Rheinland mark of conformity.
- This Type Examination Certificate only relates to the assessment of technical documentation to verify that the technical design of radio equipment meets the essential requirements of the RED 2014/53/EU and will not show compliance with essential requirements of other possible applicable EU Directives.
- The manufacturer has declared in compliance with art. 10.2 that the Radio Equipment can be operated in at least one Member State without infringing applicable requirements on the use of radio spectrum.
- Validity of this Type Examination Certificate is limited to the versions of the applied standard. If versions of standards change or modifications are made to the product, this Certificate will be invalidated.