

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 60147070 0001
Evaluation Report Nr.: 50344251 001

Manufacturer: Pylon Technologies Co., Ltd.
No. 73, Lane887 Zu Chongzhi Road
Ihangjiang Hi-Tech Park, Pudong
Shanghai
P.R. China

Product: Radio Equipment
(LFP Lithium Ion Energy Storage System)

Type Identification: Force-L1-48-zzz (zzz=148~592, in step of 74)
Force-L2-48-zzz (zzz = 148~370, in step of 74)
(PYLONTECH)

Essential requirements: 2014/53/EU (RED)
Article 3.1a Health
Article 3.1a Electrical Safety
Article 3.1b EMC
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 28.02.2020



Equipment

Product : LFP Lithium Ion Energy Storage System
Trademark :  **PYLONTECH**
Identification : Force-L1-48-zzz (zzz=148~592, in step of 74),
 Force-L2-48-zzz (zzz=148~370, in step of 74)
Product description The above models are LFP Lithium Ion Energy Storage System with Wi-Fi function.

System description

Frequency band(s) of operation : 2400-2483.5MHz
 Operating frequency : 2.4GHz Wi-Fi: 2412-2472MHz
 Channel spacing / bandwidth : 5MHz, 20MHz
 RF output power : 2.4GHz Wi-Fi: 19.98dBm (Max. e.i.r.p.)
 Type of modulation : DSSS (DBPSK, DQPSK, CCK), OFDM (BPSK, QPSK, 16QAM, 64QAM)
 Type of antenna : External Antenna
 Mode of operation (simplex / duplex) : Duplex
 Duty cycle (access protocol, if applicable) : Up to 100%
 Hardware version : V10
 Software version : V1

Documentation

User information and installation instructions
 Block diagram
 Circuit diagram
 Part list
 PCB layout
 Photo documentation
 Versions of firmware/software used
 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.
 Risk Analysis

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
3.1a	Health	--	--
3.1a	Safety	--	--
3.1b	EMC	--	--
3.2	Radio	EN 300 328 V2.1.1	50335898 001
3.3	Others	--	TÜV Rheinland (Shanghai) Co., Ltd.

Applied non-harmonised standards			
Article	Standard	Test Report No.	Issued by
3.1a Health	EN 62311:2008	50335898 001	TÜV Rheinland (Shanghai) Co., Ltd.
3.1a Safety	EN 62477-1:2012+A11+A1	50330796 001	TÜV Rheinland (Shanghai) Co., Ltd.
3.1b EMC	EN IEC 61000-6-1:2019 EN IEC 61000-6-2:2019 EN 61000-6-3:2007+A1 EN 61000-6-4:2007+A1 IEC 61000-6-1:2016 IEC 61000-6-2:2016 IEC 61000-6-3:2006+A1 IEC 61000-6-4:2018; EN 301489-1 V2.2.3 EN 301489-17 V3.2.0 (Draft)	50335284 001; 50335285 001	TÜV Rheinland (Shanghai) Co., Ltd.
3.2 Radio	--	--	--
3.3 Others	--	--	--

Other solutions, adopted to meet the essential requirements			
Article	Standard	Test Report No.	Issued by
3.1a Health	--	--	--
3.1a Safety	--	--	--
3.1b EMC	--	--	--
3.2 Radio	--	--	--
3.3 Others	--	--	--

Rationale for applied non-harmonised standards or other solutions:

- EN 62311 Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz - 300 GHz)
- EN 62477-1 Safety requirements for power electronic converter systems and equipment - Part 1: General
- EN IEC 61000-6-1 and IEC 61000-6-1 Electromagnetic compatibility (EMC) – Part 6-1: Generic standards – Immunity standard for residential, commercial and light-industrial environments; EN IEC 61000-6-2 and IEC 61000-6-2 Electromagnetic compatibility (EMC) – Part 6-2: Generic standards – Immunity standard for industrial environments; EN 61000-6-3 and IEC 61000-6-3 Electromagnetic compatibility (EMC) – Part 6-3: Generic standards – Emission standard for residential, commercial and light-industrial environments; EN 61000-6-4 and IEC 61000-6-4 Electromagnetic compatibility (EMC) – Part 6-4: Generic standards – Emission standard for industrial environments; EN 301 489-1 ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements; EN 301 489-17 Part 17: Specific conditions for Broadband Data Transmission Systems; Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU

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.