UK – TYPE EXAMINATION CERTIFICATE

RADIO EQUIPMENT REGULATIONS 2017 (SI 2017/1206)
Schedule 3 Module B

MANUFACTURER

Name	:	LG Electronics Inc.
Address	:	128, Yeoui-daero, Yeongdeungpo-gu, Seoul, Republic of Korea
Contact Name & Title	:	Park Joongsun, Chief Research Engineer
Email	:	joongsun.park@lge.com
Phone number	:	+ 82-10-2358-4215

PRODUCT DESCRIPTION

Trademark/Trade Name	:	VW AG
Model Number	:	TLVUE4IU-E, TLVUW3IU-E
Product Description	:	Telematics
HW and SW Versions	:	HW: TLVUE4IU-E: H09, TLVUW3IU-E: H09, SW: TLVUE4IU-E: 0052, TLVUW3IU-E: 0606

APPROVED BODY

Certificate issued by	:	Approved Body 1177, TIMCO Engineering, Inc.	
Certificate number	:	U1177-242505 (Original Project U1177-231921, January 27, 2023)	
Name and Signature	:	Bruno Clavier	Date: March 15, 2024

The device shall be marked as follows: UKCA

Based on the evidence presented in the Technical Documentation, TIMCO Engineering, Inc., as appointed Approved Body, has issued this UK-Type Examination Certificate in accordance with Schedule 3, Module B. The product described appears to be in conformity with the essential requirements Regulation 6.1(a), 6.1(b), and 6.2 of RER 2017 (SI 2017/1206). This certificate relates only to the documents as provided to Timco Engineering, Inc. and is valid up to (1) the date of cessation of presumption of conformity of any of the superseded standards which were used for testing this product and assessed by Approved Body or (2) the date of modifications to the approved type that may affect the conformity of the apparatus with the essential requirements of SI 2017/1206 or the conditions for validity of that certificate, whichever comes first.

TIMCO Engineering, Inc. 13146 NW 86th Drive, Suite 400 Alachua, FL 32615 USA www.timcoengr.com A2LA Accredited (Certificate No. 0955.02)	This Certificate is issued under the provision that TIMCO Engineering, Inc. nor its subsidiary companies accept any liability concerning the contents of this document other than forced by law. Reproduction of the Certificate (with Annex) in full is allowed. Reproduction of parts of this certificate may only be allowed by written permission of TIMCO Engineering, Inc.

UK – TYPE EXAMINATION CERTIFICATE
U1177-242505 (Original Project U1177-231921, January 27, 2023)

Date: March 15, 2024

PRODUCT SPECIFICATIONS

Intended Use / Category	:	Global Navigation Satellite System (GNSS) (BDS/Galileo/GLONASS/GPS/SBAS)
RF output power	:	N/A
Frequency range (MHz)	:	1559 - 1610
Modulation	:	N/A
Antenna type	:	External antenna

Intended Use / Category	:	GSM 900
RF output power	:	33.20 dBm (Conducted)
Frequency range (MHz)	:	880 - 915
Modulation	:	GMSK, 8PSK
Antenna type	:	External antenna

Intended Use / Category	:	DCS 1800
RF output power	:	30.85 dBm (Conducted)
Frequency range (MHz)	:	1710 - 1785
Modulation	:	GMSK, 8PSK
Antenna type	:	External antenna

Intended Use / Category	:	WCDMA Band 1
RF output power	:	23.66 dBm (Conducted)
Frequency range (MHz)	:	1920 - 1980
Modulation	:	BPSK, QPSK, 16QAM, 64QAM
Antenna type	:	External antenna

Intended Use / Category	:	WCDMA Band 3
RF output power	:	23.61 dBm (Conducted)
Frequency range (MHz)	:	1710 - 1785
Modulation	:	BPSK, QPSK, 16QAM, 64QAM
Antenna type	:	External antenna

Intended Use / Category	:	WCDMA Band 8
RF output power	:	23.15 dBm (Conducted)
Frequency range (MHz)	:	880 - 915
Modulation	:	BPSK, QPSK, 16QAM, 64QAM
Antenna type	:	External antenna

Intended Use / Category	:	LTE Band 1
RF output power	:	22.92 dBm (Conducted)
Frequency range (MHz)	:	1920 - 1980
Modulation	:	QPSK, 16QAM
Antenna type	:	External antenna

Intended Use / Category	:	LTE Band 3
RF output power	:	23.14 dBm (Conducted)
Frequency range (MHz)	:	1710 - 1785
Modulation	:	QPSK, 16QAM
Antenna type	:	External antenna

Intended Use / Category	:	LTE Band 7
RF output power	:	22.80 dBm (Conducted)
Frequency range (MHz)	:	2500 - 2570
Modulation	:	QPSK, 16QAM
Antenna type	:	External antenna

Intended Use / Category	:	LTE Band 8
RF output power	:	22.66 dBm (Conducted)
Frequency range (MHz)	:	880 - 915
Modulation	:	QPSK, 16QAM
Antenna type	:	External antenna

Intended Use / Category	:	LTE Band 20
RF output power	:	23.64 dBm (Conducted)
Frequency range (MHz)	:	832 - 862
Modulation	:	QPSK, 16QAM
Antenna type	:	External antenna

Intended Use / Category	:	LTE Band 28
RF output power	:	22.60 dBm (Conducted)
Frequency range (MHz)	:	703 - 748
Modulation	:	QPSK, 16QAM
Antenna type	:	External antenna

Intended Use / Category	:	LTE Band 32
RF output power	:	N/A
Frequency range (MHz)	:	1452 - 1492
Modulation	:	QPSK, 16QAM
Antenna type	:	External antenna

The following standards were applied:

ESSENTIAL REQUIREMENTS

Essential Requirement		**Standard Number & Version**
Radio (Regulation 6.2)	:	EN 301 908-1 V15.2.1 EN 301 908-2 V13.1.1 EN 301 908-13 V13.2.1 EN 303 413 V1.2.1 EN 301 511 V12.5.1
EMC (Regulation 6.1b)	:	EN 301 489-1 V2.2.3 EN 301 489-19 V2.2.1 EN 301 489-52 V1.2.1
Health (Regulation 6.1a)	:	EN IEC 62311:2020
Safety (Regulation 6.1a)	:	EN 62368-1:2014+A11:2017 EN IEC 62368-1:2020+A11:2020

ELEMENTS ASSESSED

#	Description	
1.	A general description of the radio equipment including: (i) Photographs or illustrations showing external features, marking and internal layout; (ii) Versions of software or firmware affecting compliance with essential requirements; (iii) User information and installation instructions;	☑
2.	Conceptual design and manufacturing drawings and schemes of components, sub-assemblies, circuits and other relevant similar elements	☑
3.	Descriptions and explanations necessary for the understanding of those drawings and schemes and the operation of the radio equipment	☑
4.	List of the designated standards applied in full or in part, and, where those designated harmonized standards have not been applied, descriptions of the solutions adopted to meet the essential requirements, including a list of other relevant technical specifications applied. In the event of partly applied designated standards, the technical documentation shall specify the parts which have been applied	☑
5.	Copy of the Declaration of Conformity	☑
6.	An explanation of the compliance with the requirement of Regulation 8 and of the inclusion or not of information on the packaging in accordance with Regulation 14	☑
7.	Risk Assessment. RER Schedule 3 module B - Analysis and assessment of the risk(s)	☑
8.	**If Applicable:** Results of design calculations made, examinations carried out, and other relevant similar elements	☑
9.	**If Applicable:** Where the conformity assessment module in Schedule 3 (Type examination and conformity to type based on internal production control) has been applied, copy of the Type examination certificate and its annexes as delivered by other approved bodies involved.	☐
10.	**If Applicable:** Modification/Standard Update/Applicant or Manufacturer cover letter explaining the changes to the existing version of the product along with supporting exhibits.	☑

TEST REPORTS ASSESSED

Type of Test Report	Test Report Number	Issue Date/Rev. No.
Radio	DRTKCET2212-0451	Dec. 28, 2022 / 00
Radio	DRTKCET2212-0452	Dec. 28, 2022 / 00
Radio	DRTKCET2212-0453	Dec. 28, 2022 / 00
Radio	DRTKCET2312-0272	Dec. 08, 2023 / 00
Radio	ER240703	Jun. 01, 2022 / 00
Radio	EG240703	Jun. 01, 2022 / 00
Health	DRTKCET2312-0273	Dec. 08, 2023 / 00
EMC	DREKCEE2403-0140	Mar. 05, 2024 / 00
Safety	KR22ZNY7 001	Dec. 06, 2022 / 00

This certificate is issued under the following additional and non-exhaustive list of provisions of the Radio Equipment Regulations 2017 (SI 2017/1206) of the Statutory Instruments of the UK:

1. **Regulation 7**: Before placing radio equipment on the market, a manufacturer must ensure that it has been designed and manufactured in accordance with the essential requirements
2. **Regulation 8:** Before placing radio equipment on the market, a manufacturer must ensure it has been constructed so that the radio equipment can be operated without causing an infringement of the applicable requirements on the use of the radio spectrum.
3. **Regulation 11:** A manufacturer must, for a period of 10 years beginning on the day on which the radio equipment is placed on the market, keep and, upon request, make available to an enforcing authority the following in relation to radio equipment—
   (a)a copy of the declaration of conformity, and
   (b)the technical documentation.
4. **Regulation 15:**
   (1) A manufacturer who considers, or has reason to believe, that radio equipment which they have placed on the market is not in conformity with Part 2, if appropriate, must immediately take the corrective measures necessary to—
   (a) bring the radio equipment into conformity,
   (b) withdraw the radio equipment, or
   (c) recall the radio equipment.
   (2) Where the radio equipment presents a risk, the manufacturer must immediately inform the market surveillance authority, of the risk, giving details of—
   (a) the respect in which the radio equipment is considered not to be in conformity with Part 2, and
   (b) any corrective measures taken and the results of those measures.
5. **Regulation 12:**
   (1) Before placing radio equipment on the market, a manufacturer must ensure that the radio equipment bears—
   (a) a type, batch or serial number, or
   (b) another element which allows the radio equipment to be identified.
   (2) Before placing radio equipment on the market, a manufacturer must indicate on the radio equipment—
   (a) the name, registered trade name or registered trade mark of the manufacturer,
   (b) a postal address at which the manufacturer can be contacted.
   (3) The information specified in paragraph (2) must be in a language which can be easily understood by end-users and the enforcing authority.
   (4) Where the size or nature of the radio equipment prohibits a manufacturer from complying with the requirement in paragraph (1) or paragraph (2), the manufacturer must provide the required information either on the radio equipment's packaging or in a document which accompanies the radio equipment.
   (5) The manufacturer's postal address must indicate a single point at which the manufacturer can be contacted.
6. **Regulation 23:**
   (1) Before placing radio equipment on the market, an importer must indicate on the radio equipment—
   (a) the name, registered trade name or registered trade mark of the importer, and
   (b) a postal address at which the importer can be contacted.
   (2) The information specified in paragraph (1) must be in a language which can be easily understood by end-users and the enforcement authority.
   (3) Paragraph (1) does not apply where—
   (a) either—
   (i) it is not possible to set out the information referred to in paragraph (1) on the radio equipment, or
   (ii) the importer has imported the radio equipment from an EEA state and places it on the market within the period of 18 months beginning with exit day, and
   (b) before placing the radio equipment on the market, the importer sets out the information referred to in paragraph (1)-
   (i) on the packaging; or
   (ii) in a document accompanying the safety component.

7. **Regulation 13:**
(1) When placing radio equipment on the market, a manufacturer must ensure that radio equipment is accompanied with instructions and safety information which—
(a) are clear, legible and in easily understandable English
(b) include information required to use the radio equipment in accordance with its intended use and
(c) include a description of accessories and components, including software, which allow the radio equipment to operate as intended.
(2) In the case of radio equipment which can intentionally emit radio waves, the manufacturer must also include information about—
(a) the frequency band or bands in which the radio equipment can operate, and
(b) the maximum radio-frequency power transmitted in the frequency band or bands in which the radio equipment operates.
(3) When placing radio equipment on the market, a manufacturer must ensure that each item of radio equipment is accompanied by either a copy of the declaration of conformity or a simplified declaration of conformity drawn up in accordance with regulation 43 (simplified declaration of conformity).
(4) Where the radio equipment is to be made available to consumers and other end-users in the United Kingdom, the language which can be easily understood is English.
8. **Regulation 14:**
(1) Where there are restrictions on putting into service or requirements for authorisation of use, a manufacturer must include information on the packaging of the radio equipment which identifies the geographical area in the United Kingdom where the restrictions on putting into service or the requirements for authorisation of use exist.
(2) The information referred to in paragraph (1) must—
(a) be completed in the instructions required by regulation 13,
(b) subject to paragraph (3), be presented in the manner and form specified in the Implementing Regulation how to present the information provided for in Article 10(10) of Directive 2014/53/EU of the European Parliament and the Council (EU) 2017/1354 (Regulation 14 of the 2017 Regulations).
(3) Paragraph (2)(b) of this Regulation applies to radio equipment placed on or after exit day.
9. **Regulation 16:**
(1) Following a request from the enforcing authority, the manufacturer must, within such reasonable period as the authority may specify, provide the authority concerned with all the information and documentation necessary to demonstrate that the radio equipment is in conformity with Part 2
(2) A request referred to in paragraph (1)—
(a) is one that was made during the period of 10 years beginning on the day that the manufacturer places the radio equipment on the market, and
(b) must be accompanied by the reasons for making the request.
(3) The information referred to in paragraph (1)—
(a) may be provided in electronic form, and
(b) must be in a language which can be easily understood by the authority concerned.
(4) A manufacturer must, at the request of the authority concerned, cooperate with that authority on any action taken to—
(a) evaluate radio equipment in accordance with regulation 59 (evaluation of radio equipment presenting a risk),
(b) eliminate the risks posed by radio equipment which the manufacturer has placed on the market.
10. **Regulation 17:**
(1) A manufacturer must ensure, before placing radio equipment on the market, that procedures are in place to ensure that series production remains in conformity with Part 2.
(2) In doing so, the manufacturer must take adequate account of—
(a) any change in radio equipment design or characteristics, and
(b) any change in a designated standard or in another technical specification by reference to which the declaration of conformity was drawn up.

11. **Regulation 43:**
    (1) Where only a simplified declaration of conformity is provided pursuant to regulation 13(3), it must contain the elements specified and have the model structure set out in Schedule 7 (simplified declaration of conformity).
    (2) The full text of the declaration of conformity must be made available at the internet address referred to in the simplified declaration of conformity.
    Schedule 7:
    1. The simplified declaration of conformity referred to in regulation 13(3) (instructions and information to be included with the radio equipment) must be provided as follows—
        *Hereby, **[Name of manufacturer]** declares that the radio equipment type **[designation of type of radio equipment]** is in compliance with the relevant statutory requirements.*
        The full text of the declaration of conformity is available at the following internet address:xxxxxx
12. **Regulation 44:**
    (1) The UK marking must be affixed visibly, legibly and indelibly to the radio equipment or to its data plate, unless that is not possible or not warranted on account of the nature of the radio equipment.
    (2) The UK marking must be affixed visibly and legibly to the radio equipment packaging.
    (3) On account of the nature of the radio equipment, the height of the UK marking affixed to radio equipment may be lower than 5 mm, provided that the marking remains visible and legible.
    (4) When the conformity assessment procedure in Schedule 4 (conformity assessment module H) has been applied, the UK marking must be followed by the identification number of the approved body which carried out the relevant conformity assessment procedure for the radio equipment.
    (5) The identification number in paragraph (4) must have the same height as the UK marking and be affixed—
    (a) by the approved body itself, or
    (b) under the instructions of the approved body, by the manufacturer or the manufacturer's authorised representative.
13. **Schedule 6 Declaration of Conformity, Paragraph 8:** Where applicable, description of accessories and components, including software, which allow the radio equipment to operate as intended and covered by the Declaration of conformity
14. **Schedule 3 Module B, Paragraph 7(2):** The manufacturer must inform the approved body that holds the technical documentation relating to the Type examination certificate of all modifications to the approved type that may affect the conformity of the radio equipment with the essential requirements of these Regulations or the conditions for validity of that certificate. Such modifications require additional approval in the form of an addition to the original Type examination certificate.
15. **Product Specifications:** The antenna gain and any other data is provided by the applicant.