EU-TYPE EXAMINATION (MODULE B) CERTIFICATE

Radio Equipment Directive (RED) 2014/53/EU

PHOENIX TESTLAB

Notified Body Number 0700

Recognised by Bundesnetzagentur

BNetzA-bS-02/51-55

This is to certify that:
PHOENIX TESTLAB did undertake the relevant type examination procedures for the radio equipment identified below which was found to be in compliance with the essential requirements of Radio Equipment Directive (RED) 2014/53/EU subject to any conditions in the annex attached hereto.

Certificate No.	17-214092
Manufacturer	Tersus GNSS Inc.
Address	Rm 210, Building A, No. 666 Zhangheng Road, Zhangjiang Hi-tech Park, Pudong, Shanghai, P.R.C
Product Description	GNSS Receiver; with WiFi, GSM, WCDMA and GPS
Brand Name / Model Name	TERSUS / MatrixRTK

The radio equipment meets the following essential requirements

Article 3.1 a): Health and Safety	**Conform**
Article 3.1 b): Electromagnetic Compatibility	**Conform**
Article 3.2: Effective and Efficient Use of Radio Spectrum	**Conform**
Additional Essential Requirements:	**Not applicable**

Date of issue	**2017-12-14**	Expiry date:	**2022-12-13**

This certificate remains valid unless cancelled or revoked, provided the conditions in the attached annex are complied with. The conditions for the validity of this certificate are listed in the Annex.

The attached Annex forms part of this certificate. This certificate consists of 3 pages.

Seal

12/14/2017 2:48 PM

Signed by Alan Lane
Notified Body

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Annex

Technical description

Frequency Range	GSM 900 / DCS 1800 MHz 2.4G WiFi (20 MHz): 2412 - 2472 MHz 2.4G WiFi (40 MHz): 2422 - 2462 MHz BDS: 1559 - 1610MHz (B1I) GLONASS: 1559 - 1610MHz (G1), 1215 -1300MHz (G2) Galileo: 1559 - 1610MHz (E1), 1164 - 1215MHz (E5a, E5b), 1215 - 1300MHz (E6) GPS: 1559 - 1610MHz (L1), 1215 - 1300MHz (L2), 1164 -1215MHz (L5) SBAS: 1559 - 1610MHz (L1), 1164 - 1215MHz (L5) UTRA FDD Band I/VIII
Transmit Power	Max. 2W / Max. 1W WiFi: 9.66 dBm EIRP UTRA FDD: 24 dBm
Hardware Version	PCBA-ZHD20140040 (D)
Software Version	V1.0.6

System Components

Battery	BL-12500, Li-Lon 7.4V, 12500mAh, HI-Target Surveying Instrument Co., Ltd.,
GSM / WCDMA Antenna	External Antenna, 0.51 dBi
WIFI Antenna	Internal Antenna, 2.0 dBi
GNSS Antenna	External Antenna, 7.0 dBi

Optional Components

Adapter	GS40A12-PIJ, Input: AC 100V-240V, 50/60Hz 1000mA Output: DC 12V, 3340mA
Fittings	TERSUS / AT-3510, DC3-16V , 35mA

Approval documentation

External / Internal Photos	APPENDIX-PHOTOGRAPHS OF EUT CONSTRUCTIONAL DETAILS, 4 pages / 15 pages
User Manual	provided, 82 pages
Block Diagram	provided, 1 page
Circuit Diagram	provided, 19 pages
Operational Description	Product Function Diagram, 4 pages
PCB Layout / Parts Placement	provided, 2 pages / 2 pages / 2 pages / 2 pages
Parts List	provided, 3 pages
EU Declaration of Conformity	2 pages, December 11, 2017
Explanation of compliance Article 10(2) and Article 10(10)	Description in the User Manual
Further Documents	Risk Assessment, 12 pages, --

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Applied Standards and Test Reports

Specification	Laboratory	Test Report Number / Version
EN 60950-1:2006+A11:2009+ A1:2010+A12:2011+A2:2013	Standard Technology Union Co., Ltd	STUESO0170713041121T
EN 62311:2008	BZT Testing Technology Co., Ltd.	STUEMO017071304113RF7
Draft ETSI EN 301 489-1 V2.2.0 Draft ETSI EN 301 489-17 V3.2.0 Draft ETSI EN 301 489-19 V2.1.0 Draft ETSI EN 301 489-52 V1.1.0	BZT Testing Technology Co., Ltd.	STUEMO017071304113RF6
ETSI EN 301 511 V12.5.1	BZT Testing Technology Co., Ltd.	STUEMO017071304113RF1
ETSI EN 301 908-1 V11.1.1 ETSI EN 301 908-2 V11.1.1	BZT Testing Technology Co., Ltd.	STUEMO017071304113RF2 STUEMO017071304113RF3
ETSI EN 300 328 V2.1.1	BZT Testing Technology Co., Ltd.	STUEMO017071304113RF5
ETSI EN 303 413 V1.1.1	BZT Testing Technology Co., Ltd.	STUEMO017071304113RF4

Limitations / Restrictions

Operating Temperature range is -10 ~ 35 degree Celsius

Body Separation distance is 30cm by using the procedure of MPE calculation.

Notes

1. This certificate will not be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with PHOENIX TESTLAB.

2. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/them being placed on the market.

3. The manufacturer shall take all measures necessary so that the manufacturing process and its monitoring ensure conformity of the manufactured radio equipment with the approved type described in the EU-type examination certificate and with the requirements of Directive 2014/53/EU that apply to it.

4. CE The manufacturer shall affix the CE marking to each item of radio equipment that is in conformity with the type described in the EU-type examination certificate and satisfies the applicable requirements of the Directive.

5. The manufacturer shall draw up a written EU declaration of conformity for each radio equipment type and keep it at the disposal of the national authorities for 10 years after the radio equipment has been placed on the market. The EU declaration of conformity shall identify the radio equipment type for which it has been drawn up. A copy of the EU declaration of conformity shall be made available to the relevant authorities upon request.

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