

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 60121098 0001

Evaluation Report Nr.: 50052699 002

Manufacturer: ZTE Corporation
ZTE Plaza, Keji Road South,
Hi-Tech Industrial Park,
Nanshan District, Shenzhen
Guangdong 518057
China

Product: Radio Equipment
(Broadband digital trunking terminal)

Type Identification: GH650
(ZTE)

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 07.07.2017



Notified Body


S. Peng

Annex 1 to the Notified Body Type Examination Certificate

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**Equipment**

Product : Broadband digital trunking terminal
Trademark : ZTE
Identification : GH650
Product description : The Product is a GSM/WCDMA broadband digital trunking terminal, which supports WiFi, GPS and PMR functions.

System description

Frequency band(s) of operation : E-GSM, DCS, WCDMA Band I, 2400-2483.5 MHz, 400-470MHz, 1575.42MHz
Operating frequency : E-GSM Band: Uplink: 880-915MHz, Downlink: 925-960MHz
 DCS Band: Uplink: 1710-1785MHz, Downlink: 1805-1880MHz
 WCDMA Band I: Uplink: 1920-1980MHz, Downlink: 2110-2170MHz
 Wi-Fi: 2412-2472MHz
 PMR: 400.05-469.95MHz
 GPS: 1575.42MHz
Channel spacing / bandwidth : 12.5KHz, 200kHz, 20MHz
RF output power : E-GSM Band: 33dBm±3dB
 DCS Band: 30dBm+4dB/-3dB
 WCDMA Band: 24dBm+1.7dB/-3.7dB
 Wi-Fi: 15.7dBm (Max. e.i.r.p)
 PMR: 26.69dBm (Max. conducted)
Type of modulation : GMSK, 8PSK, QPSK, 16QAM, FM, DSSS (DBPSK, DQPSK, CCK), OFDM (BPSK, QPSK, 16QAM, 64QAM)
Type of antenna : External Antenna
Mode of operation (simplex / duplex) : Duplex (E-GSM, WCDMA, Wi-Fi), Simplex (PMR, GPS)
Duty cycle (access protocol, if applicable) : Up to 100%
Firmware/Driver version : --

Provided Documentation

User Manual
 Block Diagram
 Circuit Diagram
 Part Lists
 PCB Layout
 Photo Documentation

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; EN 301 511 V9.0.2; EN 301 908-1 V11.1.1 EN 301 908-2 V11.1.1; EN 300 086 V2.1.2	SET2017-07914; SET2017-08572; SET2017-08573; 68.950.16.490.02	CCIC Southern Electronic Product Testing (Shenzhen) Co., Ltd. TUV SUD Certification and Testing(China) Co., Ltd. Shenzhen Branch
3.3 Others	--	--	--

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Applied non-harmonised standards [see foot-note (*)]			
Article	Standard	Test Report No.	issued by
3.1a Health	EN 50360:2001+A1:2012 EN 50566:2013 EN 62479:2010 EN 62311:2008	SET2016-13551 68.950.16.233.01	CCIC Southern Electronic Product Testing (Shenzhen) Co., Ltd. TUV SUD Certification and Testing(China) Co., Ltd. Shenzhen Branch
3.1a Safety	EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013	RP20170628002	Shenzhen Zoom Rel Testing Technology Co., Ltd.
3.1b EMC	EN 301 489-1 V2.2.0 (Draft) EN 301 489-17 V3 2.0 (Draft) EN 301 489-19 V2.1.0 (Draft) EN 301 489-52 V1.1.0 (Draft); EN 301 489-5 V2.2.0 (Draft)	SET2017-08708; 68.760.16.625.02	CCIC Southern Electronic Product Testing (Shenzhen) Co., Ltd. TUV SUD Certification and Testing(China) Co., Ltd. Shenzhen Branch
3.2a Radio	EN 303 413 V1 1 1	SET2017-07915	CCIC Southern Electronic Product Testing (Shenzhen) Co., Ltd.
3.3 Others	--	--	--

Other solutions, adopted to meet the essential requirements [see foot-note (*)]			
Article	Standard	Test Report No.	issued by
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***Rationale for applied non-harmonised standards or other solutions**

- EN 50360 Product standard to demonstrate the compliance of mobile phones with the basic restrictions related to human exposure to electromagnetic fields (300 MHz - 3 GHz); EN 50566 Product standard to demonstrate compliance of radio frequency fields from handheld and body-mounted wireless communication devices used by the general public (30 MHz - 6 GHz); EN 62479 Assessment of the compliance of low power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz); EN 62311 Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz - 300 GHz)
- EN 60950-1 Information technology equipment - Safety - Part 1: General requirements
- EN 301 489-1 ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements; EN 301 489-5 ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 5: Specific conditions for Private land Mobile Radio (PMR) and ancillary equipment (speech and non-speech) and Terrestrial Trunked Radio (TETRA); EN 301 489-17 ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for Broadband Data Transmission Systems; EN 301 489-19 ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 19: Specific conditions for Receive Only Mobile Earth Stations (ROMES) operating in the 1,5 GHz band providing data communications and GNSS receivers operating in the RNSS band (ROGNSS) providing positioning, navigation, and timing data; EN 301 489-52 ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 52: Specific conditions for Cellular Communication Mobile and portable (UE) radio and ancillary equipment
- EN 303 413 Satellite Earth Stations and Systems (SES); Global Navigation Satellite System (GNSS) receivers; Radio equipment operating in the 1164 MHz to 1300 MHz and 1559 MHz to 1610 MHz frequency bands

Remarks:

- The manufacturer or his authorised representative established within the European Community must keep the technical documentation for a period ending at least 10 years after the last product has been manufactured at the disposal of the relevant national authority of any Member State for inspection purpose.
- CE marking may only be used, if all relevant and effective EC directives are complied with.
- The holder of this Type Examination Certificate is authorised to use this certificate in combination with the CE declaration of conformity.
- The holder of this Type Examination Certificate is obliged to inform TRLP of all modifications to the product that may affect conformity with the essential requirements of the RED Directive 2014/53/EU or the conditions of validity of this certificate issued by TRLP.
- 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.

Date: 07.07.2017

[Handwritten Signature]
Signature