

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 60162151 0001

Evaluation Report Nr.: CN22EHAS 001

Manufacturer:

Autel Intelligent Automobile Corp., Ltd.
Room 701, Building B1, Zhiyuan, No.1001
Xueyuan Avenue, Changyuan Community,
Taoyuan Road, Nanshan District,
Shenzhen,
518055 Guangdong
P.R. China

Product:

Radio Equipment
(ASR100)

Type

Identification:

ASR100 ASR100-XXX-XX (X = A-Z or a-z or 0-9)
(AUTEL)

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 **20.05.2022**



Notified Body

S. Peng
S. Peng

Equipment

Product : ASR100
Trademark : AUTEL
Identification : ASR100, ASR100-XXX-XX (X = A-Z or a-z or 0-9)
Product description This product is a millimeter-wave radar based on the 76 GHz to 77 GHz frequency band.

System description

Frequency band(s) of operation : 76 GHz to 77 GHz
Operating frequency : 76 GHz to 77 GHz
Channel spacing / bandwidth : 552.960 MHz
RF output power : 26.74 dBm (max. e.i.r.p.)
Type of modulation : FMCW
Type of antenna : Array Patch Antenna
Mode of operation (simplex / duplex) : n/a
Duty cycle (access protocol, if applicable) : Up to 100%
Hardware version : ASR100
Software version : ASR100_TA_app_v1.1.0

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			
3.3 Others			

Applied non-harmonised standards			
Article	Standard	Test Report No.	Issued by
3.1a Health	EN IEC 62311:2020	CN22FO6F 001	TÜV Rheinland (Shenzhen) Co., Ltd.
3.1a Safety	EN 62368-1:2014+A11:2017	CN21AEK0 001	TÜV Rheinland (Shenzhen) Co., Ltd.
3.1b EMC	EN 301 489-1 V2.2.3 EN 301 489-51 V2.1.1	2210429R-E3012100108-A	DEKRA Testing and Certification Co., Ltd
3.2 Radio	EN 301 091-1 V2.1.1	CN22FO6F 001	TÜV Rheinland (Shenzhen) Co., Ltd.
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 IEC 62311 Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz to 300 GHz)
- EN 62368-1 Audio/video, information and communication technology equipment - Part 1: Safety requirements
- EN 301 489-1 ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements; Part 51: Specific conditions for Automotive, Ground based Vehicles and Surveillance Radar Devices using 24,05 GHz to 24,25 GHz, 24,05 GHz to 24,5 GHz, 76 GHz to 77 GHz and 77 GHz to 81 GHz; Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU
- EN 301 091-1 Short Range Devices; Transport and Traffic Telematics (TTT); Radar equipment operating in the 76 GHz to 77 GHz range; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU; Part 1: Ground based vehicular radar

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.