



NOTIFIED BODY
MODULE B: EU TYPE EXAMINATION CERTIFICATE
(For Council Directive 2014/53/EU)

THIS CERTIFICATE IS ISSUED TO

Amphenol Airwave Communication Electronics Co.,Ltd

No.158 zhonggang Road, XiTang Industry Park
HaiYan, Zhejiang 314300
China

TO STATE THAT THE EQUIPMENT KNOWN AS

Amphenol T1HD, T1HD/LD

Conforms (following an evaluation of its associated Technical Documentation and subject to any restrictions stated in the attached Annex) with the essential requirements of Annex III, Module B, of the Council Directive **2014/53/EU** on Radio Equipment (RED) and the mutual recognition of their conformity, in relation to the essential requirements of:

Article 3.1(a) Health and Safety

Article 3.1(b) EMC

Article 3.2 Radio Spectrum

Details of this certification, standards used, RF parameters of this equipment and other information necessary for the correct interpretation and application, including any remarks, restrictions or observations are detailed in the attached Annex.

This is to certify that (a) sample(s) of the Product described herein has been investigated and found to be in compliance with the Standard(s) indicated on this Certificate. This certificate applies only to the product sample(s) submitted by the Applicant. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured products. UL has not established Follow-Up Service or other surveillance of the product. The Applicant/ Manufacturer are solely and fully responsible for conformity of all products to all applicable standard(s), specifications or requirements. This certificate shall only be used in its entirety. Authorization to apply the Notified Body Identification Number adjacent to the CE Marking is not permitted for Module B Certifications. The manufacturer shall keep a copy of the EU-type examination certificate, its annexes and additions together with the technical documentation at the disposal of the national authorities for 10 years after the radio equipment has been placed on the market.

Signed:

Bob DeLisi
on behalf of UL Verification Services Inc.

Issue Date:

May 8, 2023¹

Certificate No:

AN23C13098-1

¹ This certificate expires 3 years after the issue date or within one year of publication of a standard that supersedes the standard(s) listed under the SCOPE OF EXAMINATION section of this certificate.

If the device is internet connected equipment within the scope of [Commission Delegated Regulation \(EU\) 2022/30](#) an update to this certificate, or a supplemental Type Examination from another notified body, is required before **August 1st, 2024** except when harmonised standards are applied to demonstrate compliance with the essential requirements of articles 3.3(d),(e) and/or (f) as applicable.

ANNEX

SCOPE OF EXAMINATION

Article	Applied standard(s) (and version) or reference.
Article 3.1a (Health and Safety):	EN IEC 62368-1:2020+A11:2020, EN IEC 61322:2020, EN 62479:2010
Article 3.1b (EMC)	EN 301 489-1 V2.2.3, EN 301 489-3 V3.2.3, EN 55032:2015+A11:2020, EN 55035:2017 +A11:2020
Article 3.2 (Radio Spectrum use)	EN 303 345-1 V1.1.1, EN 303 345-2 V1.2.1, EN 303 345-3 V1.1.1, EN 303 345-4 V1.1.1

TECHNICAL DOCUMENTATION DETAILS

Title:	Technical Construction File (TCF)
Reference Number:	N/A
Issue Date:	February 21, 2023
Contact Name:	Zhan Li

GENERAL PRODUCT DETAILS

Brand / Trade Name:	Amphenol	
Model Number(s) / Type Designation:	T1HD, T1HD/LD	
Build Version / Revision Level:	GM8193-04-000-C-FI	
Software Name and Version:	N/A	
Operating Frequency	AM Receiver	535 – 1705 kHz
	FM Reciever	88 - 108 MHz
	DAB Receiver	174 - 240 MHz
Additional Information (modulation)	AM, FM, PSK	
Description of Use / Function:	AM/FM/DAB Low Noise Amplifier Note: T1HD only supports AM/FM	
Manufacturers Company Name:	Amphenol Airwave Communication Electronics Co.,Ltd	
Manufacturers Address:	No.158 zhonggang Road, XiTang Industry Park HaiYan, Zhejiang China	

ACCESSORIES

None

PRODUCT VARIANT DETAILS

Details of Product Variant(s) covered by this Notified Body Certification: None

ASSESSMENT OF STANDARDS APPLIED

References to RE-D harmonised standards consider Official Journal entries to the Commission Implementing Decision (EU) 2022/498 of 2022/2191 of 8 November 2022.

This device does not fall under the scope of the limited number of harmonised standards that address the essential requirements of Article 3.1a. The standards used to assess this device are considered state of the art as they are currently harmonised under the Low Voltage Directive (LVD) for the purposes of evaluating electrical safety and RF exposure. The LVD has the same essential requirements with regards to safety as the RE-D.

Compliance with rf exposure requirements is based on a unintentional emissions meeting the required limits and therefore considered inherently compliant with RF Exposure requirements.

There are currently no harmonised standards listed to cover an assessment of this device against the essential requirements of Article 3.1b. The standards used are considered state of the art as they are the most recent draft or published candidate standards for use with the Radio Equipment Directive (RE-D) covering this type of equipment for the assessment of the EMC for the radio functions. Assessment of other functions was made using harmonised standards for the EMC Directive which has the same essential requirements as Article 3.1(b) of the RE-D.

Harmonised standards were used to demonstrate compliance with Article 3.2 of the Radio Equipment Directive. All the standards referenced were current as of the date of this evaluation. No superseding standards had been listed in the Official Journal as of the date this certificate was issued.

Restrictions related to the presumption of conformity with the essential requirement as regards the receiver unwanted emissions for standards EN 303 345-2 V1.2.1, EN 303 345-3 V1.1.1, and EN 303 345-4 V1.1.1 have been addressed by applying all test cases.

The standards used represent state of the art with respect to demonstrating compliance with the essential requirements of the RE-D. The manufacturer needs to consider re-assessment of compliance as newer versions of standards used are published and harmonised.

REMARKS AND OBSERVATIONS

The manufacturer's declaration of conformity (DoC) appropriately lists the standards used and identifies the equipment by a serial number. The manufacturer is reminded that the EU Declaration of Conformity and the Technical Documentation, which includes this certificate, shall be kept at the disposal of the National Authorities for ten years after the radio equipment has been placed on the market.

The product labelling and product packaging contained the CE mark as required by the RE-D. The product label did not include the manufacturer or importer information however, as this device is pre-installed in the vehicle before importation, the manufacturer/importer information will be supplied in the vehicle owner's manual.

The product labeling included serial number allowing its identification as required by the RE-D.

The product is considered a Class 1 device with no restrictions on use as described in the *Publication in accordance with Article 1(3) of Commission Decision 2000/299/EC (Version January 2020)*. As of the date this certificate was issued the publication was available for download from the [Europa website](#).

It is the responsibility to the manufacturer to ensure the ongoing compliance of this equipment. The manufacturer shall inform the notified body of all modifications to the approved type that may affect the conformity of the radio equipment with the essential requirements of the Radio Equipment Directive or the conditions for validity of this certificate. Such modifications shall require additional approval in the form of an addition to this EU-type examination certificate.

REVISION HISTORY

May 8, 2023

Original version (-1) released.