



NOTIFIED BODY

MODULE B: EU TYPE EXAMINATION CERTIFICATE

(For Council Directive 2014/53/EU)

THIS CERTIFICATE IS ISSUED TO

RF CONTROLS, LLC

1400 South 3rd Street
St. Louis, MO 63104
USA

TO STATE THAT THE EQUIPMENT KNOWN AS

RF Controls CS-445B

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:

25 October 2019¹

Certificate No:

AN19C11211-1

¹ This certificate expires 5 years after the issue date or within one year of publication of a standard that would supersede the standard(s) used to demonstrate compliance and that would require re-assessment of the device.

ANNEX

SCOPE OF EXAMINATION

Article	✓/✗	Applied standard(s) (and version) or reference.
Article 3.1a (Health and Safety):	✓	EN 62368-1:2014 +AC:2015, EN 62311:2008
Article 3.1b (EMC)	✓	EN 301 489-1 v2.1.1, EN 301 489-3 v2.1.1, EN 55032:2012 +AC:2013, EN 55024:2010, EN 55035:2017
Article 3.2 (Radio Spectrum use)	✓	EN 302 208 v3.1.1
Article 3.3 a-i (Special Features)	-	Not in scope of assessment

TECHNICAL DOCUMENTATION DETAILS

Title:	CS-445B
Reference Number:	E332959
Issue Date:	July 15, 2019
Contact Name:	Graham Bloy

GENERAL PRODUCT DETAILS

Brand / Trade Name:	RF Controls								
Model Number(s) / Type Designation:	CS-445B								
Build Version / Revision Level:	11001-330-R3-11001-328-R4								
Software Name and Version:	0B4.19.160-0.0.0.16-0x09								
Operating Frequency and Declared Maximum Output Power (e.i.r.p.) and Maximum Antenna Gains	<table> <tr> <td>RFID (Lower)</td> <td>865.7 – 867.5 MHz</td> <td>28.03 dBm</td> <td>7.82 dBi</td> </tr> <tr> <td>RFID (Upper)</td> <td>916.3 – 919.9 MHz</td> <td>30.91 dBm</td> <td>7.82 dBi</td> </tr> </table>	RFID (Lower)	865.7 – 867.5 MHz	28.03 dBm	7.82 dBi	RFID (Upper)	916.3 – 919.9 MHz	30.91 dBm	7.82 dBi
RFID (Lower)	865.7 – 867.5 MHz	28.03 dBm	7.82 dBi						
RFID (Upper)	916.3 – 919.9 MHz	30.91 dBm	7.82 dBi						

Note: EC Decision 2018/1538/EU only allows operation at center frequencies of 916.3 MHz, 917.5 MHz, and 918.7 MHz. The upper channel, 919.9 MHz, must be disabled unless explicitly approved by the member state where the device is installed.

Additional Information (modulation)	RFID: ASK or PR-ASK
Description of Use / Function:	RFID Reader
Manufacturers Company Name:	RF CONTROLS, LLC
Manufacturers Address:	1400 South 3rd Street, Suite 220 St. Louis, MO 63104

ACCESSORIES

External ferrite - FAIR-RITE 0431176451

PRODUCT VARIANT DETAILS

Details of Product Variant(s) covered by this Notified Body Certification:	None within the European Union
--	--------------------------------

REMARKS, RESTRICTIONS AND OBSERVATIONS

This device does not fall under the scope of the limited number of harmonised listed to 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 minimum device-to-user separation distance of 30 cm.

There are currently no harmonised standards listed to cover an assessment of this device against the essential requirements of Article 3.1b, with the exception of EN 55035:2017 which is limited in scope to broadcast receivers. The standards used are considered state of the art as they are the most recent draft or published candidate standards for use with the RE-D covering this type of equipment.

Harmonized standards, as listed in OJ C 326 of September 14, 2018, were used to demonstrate compliance with Article 3.2 of the RED Directive. All the standards referenced were current as of the date of this evaluation.

The manufacturer's declaration of conformity appropriately lists the standards used. The declaration is missing the date and place of issue, signatories name (printed) and contact address. The manufacturer is reminded that these are required to be on the declaration.

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 DoC shall be shipped with each device sold. This may be a shortened form as described in Article 10(9) and Annex VII.

The product labelling and product packaging contained the CE mark as required by the Directive. The product labeling included serial number allowing its identification as required by the Directive.

The product supports operations that are subject to restrictions on use as detailed for Annex 11, sub-band b of ERC Recommendation (70-03) and EC Decision 2018/1538/EU. The packaging and manual for this device follows the requirements as to how to present the information required by Article 10(10) defined in [Commission Implementing Regulation \(EU\) 2017/1354](#).

REVISION HISTORY

Date:10/25/2019 Original version (-1) released.