

Information Note

Topic OWS451 and OWL253 RED certification for 5 GHz band
UBX-18010600

Author Len Albertsson

Date 13 April 2018

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1 Affected Products

Product Name	Ordering Code	Type Number	Remarks
OWL253	CB-OWL253I-04	CB-OWL253I-04-2	
OWL253	CB-OWL253X-04	CB-OWL253X-04-2	
OWS451	4211 5224 84	4211 5224 84	
OWS451	CB-OWS451I-04	CB-OWS451I-04-2	
OWS451	CB-OWS451X-04	CB-OWS451X-04-2	
OWS451	CB-OWS451X-06	CB-OWS451X-06-2	
OWS451	CB-OWS451I-06	CB-OWS451I-06-2	
OWS451	CB-OWS451X-A0-0	CB-OWS451X-A0-0	

2 Type of Change

- Hardware modification
- Software/driver update
- Documentation update
- Others, RED compliance for 5 GHz band

3 Description of Change

3.1 RED compliance for 5 GHz band

The European Radio Equipment Directive (RED) 2014/53/EU [2], which became mandatory on June 13, 2017, included an exception that allows compliance of the adaptivity requirements (Channel Access Mechanism) in EN 301 893 according to v1.8.1 clause 4.8 instead of v2.1.1 clause 4.2.7. This exception is in place until June 12, 2018. This means that the radio transmitters operating in the 5 GHz band, and that are made available on the European market after June 12, 2018, must comply with EN 301 893 v2.1.1 clause 4.2.7 for the adaptivity requirements.

u-blox has worked extensively with the chip supplier Redpine Signals to update the affected products to ensure compliance with the new EN 301 893 v2.1.1 clause 4.2.7 adaptivity requirements, but has not been able to get a pass result on the adaptivity test case. Due to this, we are forced to inform our customers that from June 13, 2018 onwards, the affected products will no longer meet the new RED adaptivity requirements for the 5 GHz band (EN 301 893 v2.1.1 clause 4.2.7).

The RED compliance for the 2.4 GHz band is not affected, and approvals in countries outside of Europe are also not affected. End products made available on the European market before June 13, 2018 are not affected. There are no changes to the software or hardware of the affected modules, and product deliveries will continue as before.

The Radio Spectrum Efficiency compliance statement for the affected products are listed below:

2.4 GHz:

- EN 300 328 v2.1.1: Fully compliant

5 GHz:

- EN 301 893 v1.8.1: Fully compliant
- EN 301 893 v2.1.1: Compliant, except for the adaptivity clause 4.2.7

3.2 Documentation

The *OWL253 and OWS451 EU Declaration of Conformity [1]* has been updated to reflect that the products, after June 12, 2018, are compliant with RED only for the 2.4 GHz band.

4 Customer Impact and Recommended Action

u-blox recommends that customers review the regulatory requirements for their end products to see if the EN 301 893 v2.1.1 adaptivity compliance is required.

There are no changes to the software or hardware of the affected modules, and product deliveries will continue as before.

Recommended replacement modules that are fully compliant with RED for both 2.4 GHz and 5 GHz operations are ODIN-W2 [3] as replacement for OWS451, and EMMY-W1 [4] as replacement for OWL253. Contact your u-blox sales representative if you want to evaluate ODIN-W2 or EMMY-W1 for your specific use case.

5 Reference Documents

[1] [OWL253 and OWS451 EU Declaration of Conformity \(UBX-15015229\)](#)

[2] Radio Equipment Directive (RED) information at European Commission web site

Overview:

http://ec.europa.eu/growth/sectors/electrical-engineering/red-directive_en

Harmonized standards:

https://ec.europa.eu/growth/single-market/european-standards/harmonised-standards/red_en

EN 301 893 v2.1.1:

http://www.etsi.org/deliver/etsi_en/301800_301899/301893/02.01.01_60/en_301893v020101p.pdf

EN 301 893 v1.8.1:

http://www.etsi.org/deliver/etsi_en/301800_301899/301893/01.08.01_60/en_301893v010801p.pdf

[3] ODIN-W2 product web page - <https://www.u-blox.com/product/odin-w2-series>

[4] EMMY-W1 product web page - <https://www.u-blox.com/product/emmy-w1-series>