EUT: 2609011091001, 2609011191001 **FCC ID: R7TAMB9826** **FCC Title 47 CFR Part 15** **Date of issue: 2018-05-08**

Annex acc. to FCC Title 47 CFR Part 15
relating to
Würth Elektronik eiSos GmbH & Co. KG
2609011091001, 2609011191001

Annex no. 11
RF exposure

Title 47 - Telecommunication
Part 15 - Radio Frequency Devices
Subpart C – Intentional Radiators
ANSI C63.4-2014
ANSI C63.10-2013

Deutsche Akkreditierungsstelle D-PL-12053-01-00

m. dudde hochfrequenz-technik GmbH & Co. KG **Rottland 5a** **51429 Bergisch Gladbach/ Germany** **Tel: +49 2207-96890** **Fax +49 2207-968920**

Regulation

15.247(i) Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the Commission's guidelines.

Test result

MPE calculation

These equations are generally accurate in the far field of an antenna but will over predict power density in the near field, where they could be used for making a “worst case” prediction.

$$S = PG/4\pi R^2 \quad \text{Or} \quad S = EIRP/(4\pi R^2)$$

Where
S = power density (in appropriate units, e.g. mW/cm^2)
P = power input to the antenna (in appropriate units e.g. mW)
G = power gain of the antenna in the direction of interest relative to the isotropic radiator
R = distance to the center of radiation of the antenna (appropriate units e.g. cm)
EIRP = equivalent isotropically radiated power

Calculation:

Radio frequency hazard (Section 15.247)					
Max. EIRP		**Distance**	**Calculated Power Density**	**Limit**	**Margin**
dBm	**mW**	**cm**	**mW / cm²**	**mW / cm²**	**mW / cm²**
Integrated Chip antenna					
12.0	**16.0**	20	**0.003175595**	0.60	**0.597**
11.9	**15.7**	20	**0.003115570**	0.61	**0.607**
11.9	**15.5**	20	**0.003075336**	0.62	**0.617**
Integrated wire antenna					
14.0	**25.3**	20	**0.005032978**	0.60	**0.595**
13.9	**24.8**	20	**0.004937846**	0.61	**0.605**
13.9	**24.5**	20	**0.004874078**	0.62	**0.615**
***Limit: the reference level for general public exposure according to the OET Bulletin 65, edition 97-01 Table 1.**					

The above measurements are made for following frequencies 902.5 MHz, 915 MHz and 927.5 MHz respectively.

Test Cables used	---
Test equipment used	144, 226, 651

m. dudde hochfrequenz-technik GmbH & Co. KG **Rottland 5a** **51429 Bergisch Gladbach/ Germany** **Tel: +49 2207-96890** **Fax +49 2207-968920**