

STATEMENT ON EXPOSURE TO ELECTROMAGNETIC FIELDS

EQUIPMENT

Type of equipment:	RFID locker lock with RFID Reader (13.56 MHz) and without Bluetooth
Brand name:	GANTNER
Type / Model:	GL7P.1500
Manufacturer:	GANTNER Electronic GmbH
By request of:	GANTNER Electronic GmbH

STANDARD

47 CFR §2.1091, 47 CFR §1.1307, 47 CFR §1.1310 KDB 447498 D01 v06

Evaluation

☐ Maximum input power to the transmitter is ... mW. We can assume that the transmitter is ideal and all ... mW are sent to the antenna. Magnetic coil antenna gain has maximum 0 dBi gain.

☒ Maximum output power of the RFID transmitter is 500 mW (according to form 731). Magnetic coil antenna gain has maximum 0 dBi gain.

A worst case MPE calculation is as follows:

$$S = \frac{EIRP}{\pi * r^2}$$

EIRP = 500.1 mW

r = 20 cm

$$\underline{S = 0,398 \text{ mW} / \text{cm}^2}$$

Limits

Per 47 CFR §1.1310 MPE limit for 13.56 MHz transmitter is 0,98 mW / cm², and 1 mW / cm² in the 2.4 GHz range.

RSS-102 clause 2.5.2 Routine rf exposure evaluation exemption limit for transmitters operating at 20 MHz or lower frequencies is 1 W eirp, and 2.74 W eirp at 2480 MHz.

Transmitter complies with these limits without testing

Intertek Deutschland GmbH

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