

# STATEMENT ON EXPOSURE TO ELECTROMAGNETIC FIELDS

## EQUIPMENT

Type of equipment:	13.56 MHz RFID reader in a Battery-Operated MIFARE® Locker Lock
Brand name:	GANTNER
Type / Model:	GAT Lock 6010 F
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 500mW. We can assume that transmitter is ideal and all 500mW are sent to the antenna. 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 mW

r = 20 cm

S = 0,398 mW / cm<sup>2</sup>

**Limits**

Per 47 CFR §1.1310 MPE limit for 13.56 MHz transmitter is 0,98 mW / cm<sup>2</sup>

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

Transmitter complies with these limits without testing

Intertek Deutschland GmbH

Date of issue: 2016-11-14

Issued by: Roland Dressler

