

STATEMENT ON EXPOSURE TO ELECTROMAGNETIC FIELDS

EQUIPMENT

Type of equipment: RFID Reader (13.56 MHz)

Brand name: GANTNER

Type / Model: GAT Vending 6100 BA

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 600 mW. We can assume that transmitter is ideal and all 600 mW 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 = 600 mWr = 20 cm

 $S = 0.477 \text{ mW} / \text{cm}^2$





Limits

Per 47 CFR §1.1310 MPE limit for 13.56 MHz transmitter is 0,98 mW / cm²

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

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