RFID systems

OPTIMUM

MTC RFID Pedestals are a loss prevention system based on RFID UHF. It comprises a pedestal with two RFID antennas, an embedded reader, controller and alarm combining EAS and RFID functions in one system.

RFID Pedestals detect the tagged items that pass between the pedestals, verifies if those items have been paid, and triggers an acoustic and/or visual alarm if any item has not been paid.

RFID Pedestals can use four configurations for checking if a tagged item has been paid:

- Checks the EAS bit of NXP chips
- Checks if the EPC code includes a pre-defined pattern that signals that the product has or not been paid
- Checks against the POS database if the product has been paid
- Checks bulk theft: trigger an alarm if a certain number of tags belonging to the same category are read in a certain time period (e.g. a few seconds).

RFID Pedestals comprises a master unit and a slave unit: The master unit has an integrated reader, a controller, an alarm, a visual alarm indicator and two directive antennas. The slave unit comprises two directive antennas.
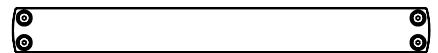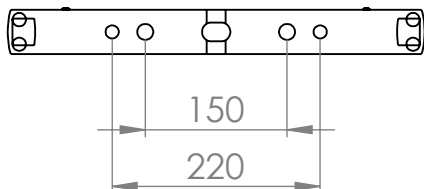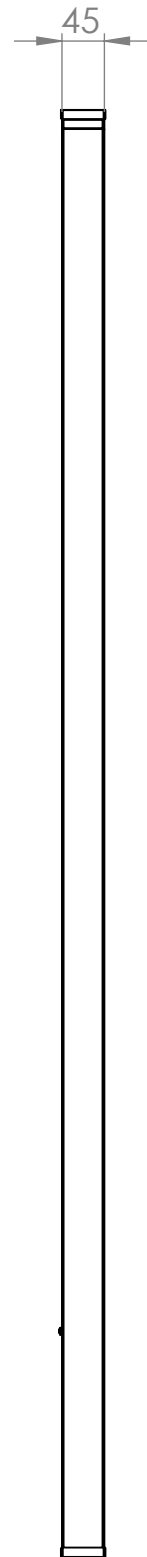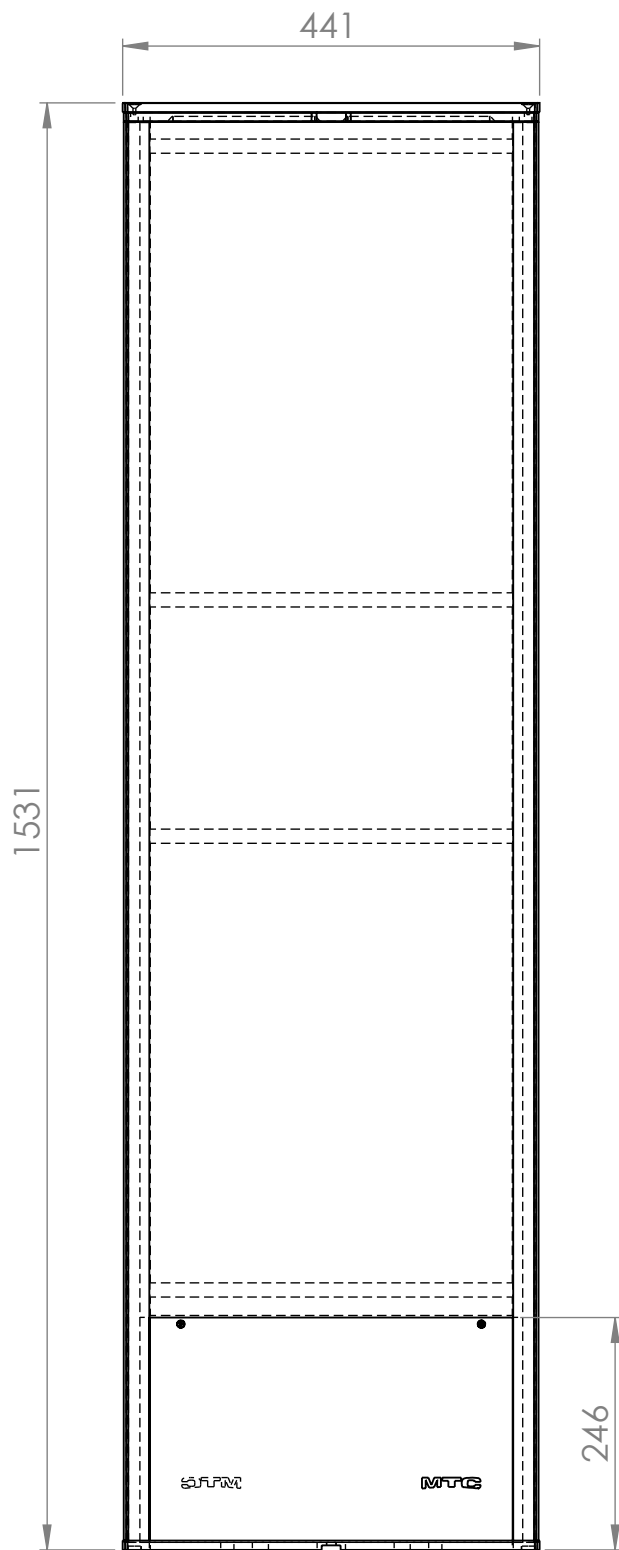
Advertising Booklets
Every antenna is equipped with 2 advertising booklets, standard delivered with full black inlays. Boosting in-store marketing campaigns never was this easy; advertising panels are inserted in just seconds!

OPTIMUM System design
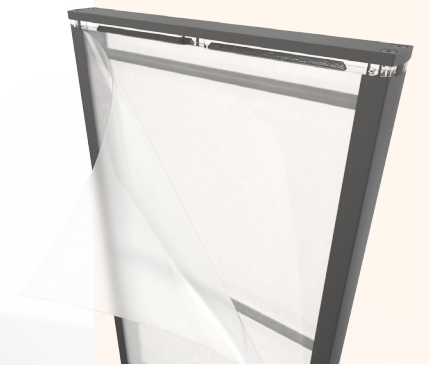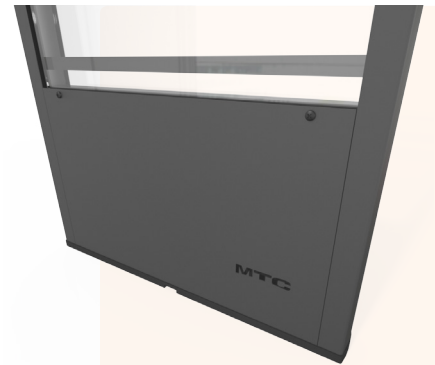
OPTIMUM System dimensions

441

1531

45

246

150

220

OPTIMUM System specifications

Technical specs

Operating Frequency EU Version	865-868 MHz
Operating Frequency US Version	902- 928 MHz
Detection distance	Depending on tags used (can be up to 5 meter)
Alarm Light	Light Emitting Diode (LED)
Alarm Audio	Signal Buzzer
Radiation angle	Fan shape 40° / 90° -15 dB sidelobes
Alarm function Preset	System gives audio alarm and light by detection of NXP EAS bit ON, or by a specific bit set in the EPC code (can be adjusted to different EAS data models)
Power supply	Power over Ethernet Optional: External power supply
Energy Consumption	6 W max., 1,5 W stand by, 0,5 W sleep modus, <5µA power down
Reader Power	max. 31,5 dBm
Radiated power	2 W ERP, 3.2 W EIRP
Interface	RS485, Ethernet
Transponder Protocol Standard	ISO 18000-6C EPC Class1 Gen2
Conformity	EN 50364, EN 301 489, EN 302 208 (LBT), EN 300 220
Temperature range	-20°C to +55°C
Dimensions	1530 * 443 * 47
Weight	15 kg
Material Housing	Aluminum
Available colors	Black
Human exposure	EN 50364
EMC	EN 301 489, EN 300 220
Air Interface (EU)	EN 302 208 v1.2 (DRM)

Product reference

Master Antenna	XS-R1AMAMOPKP12B
Slave Antenna	XS-R1ASAMOPKP12B