The certus EM-RFID Hybrid System

The Hybrid System is based on the established Certus EM technology. Ideal feasible for the EAS in libraries the ***certus*** EM System was upgraded with certus 13,56MHz RFID technology. The RFID Technology shows in it's variations a flexibility and performance which is needed for all logistic related questions.
The ***certus*** EM-RFID Hybrid System detects both EM and RFID labels.

The best EM performance can be reached with 63mm ***certus*** high quality EM labels. The flexibility of the System allows as well detecting labels from other EM label suppliers. The RFID Reader allows to detect and read all 13.56Mhz based RFID labels following the ISO 15693

The Standard Single Entry Hybrid System consists of the following components:

- A ***certus*** Uni VI EAS Electronic
- Two Large Plexi V Light EM-RFID Hybrid Gate Panels
- A ***certus*** RFID Long Range Reader (integrated in the Gate Panel foot)

The system provides all the advantages from the ***certus*** EM technique as for e.g. detection of metal covered EM labels, no shielding effect of aluminium foil and so on.
Libraries, previously only protected with EM EAS labels, can keep their labels for the EAS and expand their logistics with RFID. The powerful EM EAS features kept being used in the future for theft sensitive utilities.

The fully transparent design of the Gate Panel meets in an excellent manner the demands of modern library and shop design.

The ***certus*** RFID system triggers independently from the EM system on the following RFID parameter:

- EAS Bit
- AFI Security Word
- RFID ID Code from the Chip

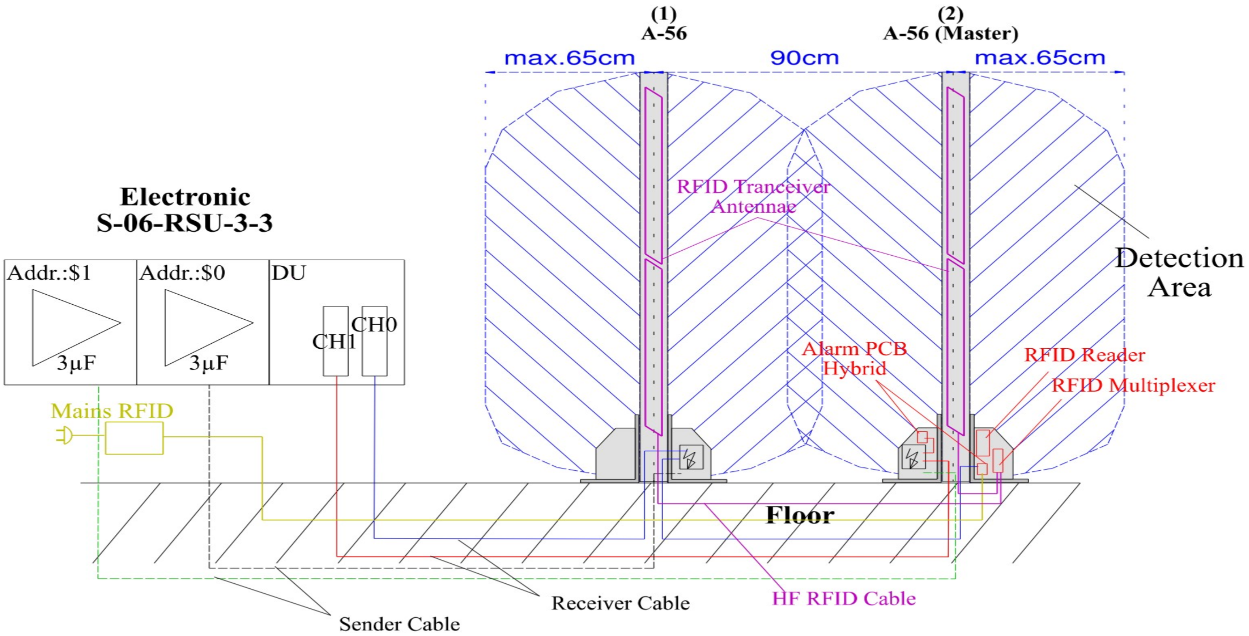

Fig.: The Certus EM-RFID Hybrid System, a schematic overview

Depending of the needs of the connected system, e.g. from a Library Management System (LMS), further parameters can be read from an RFID label following ISO 15693. The communication between the ***certus*** reader and an application can be individually designed.

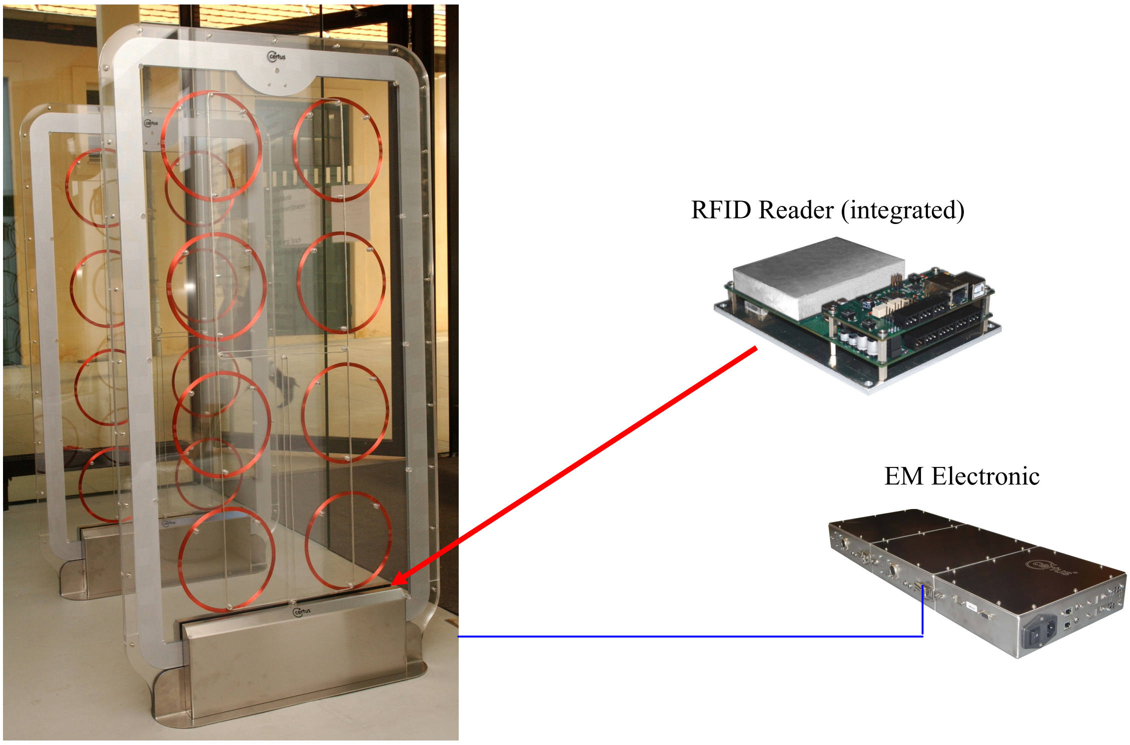

Fig.: Hybrid installation

Technical Details

Maximum gateway width:	100cm
Components	
EM-RFID Hybrid Gate Panel:	approx. 83 x 150 x 2 (foot:170)cm (l x b x h) Foot: made of stainless steel Body: made of full Acrylic glass
EM Electronic:	approx. 65 x 26 x 14 (l x b x h) cm Housing: made of stainless steel
RFID-Reader:	approx. 16 x 12 x 4,50 (l x b x h) cm (placing in an external housing possible)
Power consumption over all:	195W