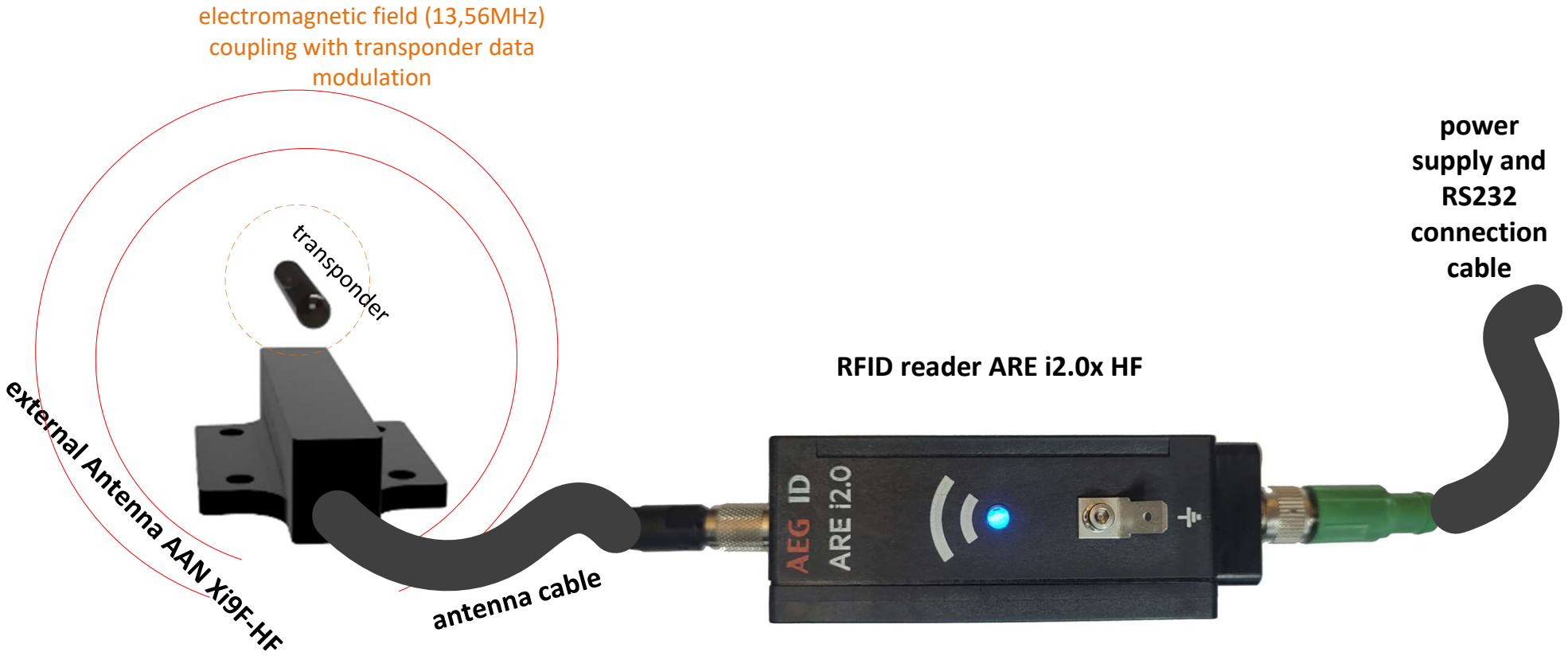
# Operational Description - RFID Reader
# ARE i2.0x HF V7IAREI20XHF

03.06.2024, FW, Rev 1




**The passive transponder is powered by the energy of electromagnetic field generated by the external reader antenna, powered by the RFID reader. This happens, when the reader receives a command to the read transponder data and the transponder ist within the interrogation zone (coupling area of the electromagnetic field).**
**The transponder transmits its data (identification information, memory content) by modulation on the couped electromagnetic field (ASK), serially coded . The reader receives via the antenna the signal, filters, amplfies and demodulates the signal in it‘s hardware receiver stage.**
**The data is extrated from demodulated signal by the CPU and processed according due to the coding format of the specific transponder used. The decoded data (identification information, memory content) is send to the data processing host via RS232 connection.**