

Brief Operation Description of MDOC-2505 Document Tray RFID Reader

Document Tray (Model Number : MDOCR-2505) is an RFID read-write Reader Terminal.

It communicates with tag (RFID passive tags) by transmitting data signal at 13.56MHz via its integrated loop antenna. The antenna is located at the front half of the tray. Passive tags positioned in the shrouded volume of the tray in turn will respond to the command by replying accordingly.

Operation of the reader complies with ISO/IEC 18000-Mode 2. The digital data signal is generated by the reader and phase modulated onto 13.56MHz, the carrier frequency, prior to propagation to the integrated loop antenna for transmission. The command data rate is 424 kBit/s and digital data is encoded with MFM modulation. Tags are replying at 106kBit/s with BPSK encoded data.

The Reader operates as a peripheral device to a normal PC via Ethernet or USB interface. It is capable of reliably read and write to tightly stacked, overlapping or touching tags.