

HF Long-Range Reader SLRM 1000



This new HF reader system was designed to fully utilize the advantages of the ISO18000-3mode3 standard such as fast anti-collision and 433 kHz downlink data rates.

The SLRM1000 demonstrates outstanding performance for the transponder types ISO18000-3 and ISO15693. The tag rates are 450 tags/s and 120 tags/s respectively. These rates are not lowered by heavy loads such as 600 tags per antenna.

Requirements such as 100 stacked documents or 600 tags on one antenna led to the favorite goal of the SLRM1000: to read huge amounts of transponders within the shortest time possible, realized on ISO 18000-3mode3. Moreover, it also sets a new benchmark for the slower ISO15693 standard.

An integrated high-level command library along with the SDK and the demonstration software (GUI) ensures the convenient and fast integration of this reader system into RFID applications, minimizing time to market.

Antenna tuning is done once with the help of a simple field-strength indicator (LED). The high data rates and the possibility to combine several antennas to one detection system enable the full flexibility in the arrangement of the antennas to perform, for example, omni-directional tag reading or instant movement detection.

Features

- Fully extends EPC functionality to HF
- Operates 16 individual Antennas
- Identifies 450 tags per second
- Reads 100 and more stacked or overlapping transponders
- Supports multi-axis antennas and enables instant movement detection
- Appropriate antennas show simplest tuning procedure
- Variable connectivity via Ethernet, USB or RS232
- 8 port decoupled digital IO interface

HF Long-Range Reader SLRM 1000

Dimensions:

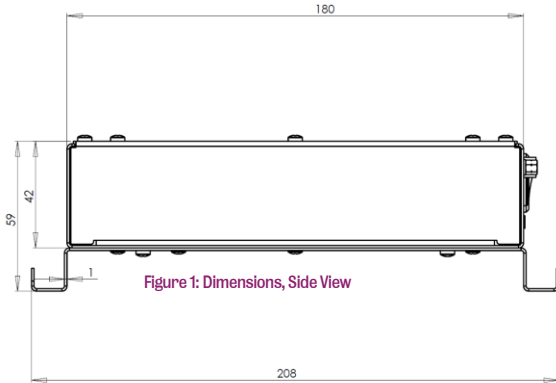


Figure 1: Dimensions, Side View

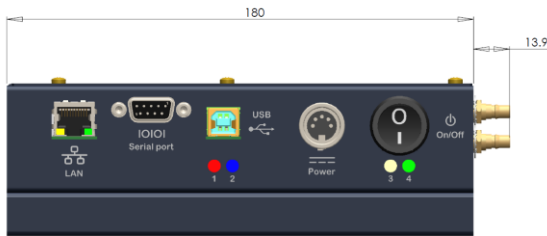


Figure 2: Front View



Figure 3: Back View



Figure 4: Side View

Electrical Specifications	
Operating Frequency	13,56 MHz
Compliances	ISO18000-3mode3, ISO15693
Uplink Data Rate	Up to 80 kHz, depending on standard
Downlink Data Rate	Up to 433 kHz
Number of Antenna IOs	16
Operating Range	Up to 1 m, depending on Tag type
Transmitted Power	0,5W – 8W, adjustable
Modulation Index	15-25%, depending on antenna
Inputs	4, decoupled
Outputs	4, decoupled
Power Supply	15-18V DC
Power Consumption	Up to 20W
Mechanical Specifications	
Dimensions (W x H x D)	185 mm x 193 mm x 48mm
Weight	Ca. 1250g
Interfaces	
RS232	115 200 Baud Rate
USB	2.0
Ethernet	UDP or TCP/IP
Conformity	
Europe	CE Marking
Postal	EN 300 330
EMC	EN 301 489
Low Voltage	EN 60950
Human Exposure	EN 50364
USA	FCC pending (Q4/13)
Temperature Range	
Environment	Indoor use
Operation Temperature	0°C to 55°C
Storage Temperature	-25°C to 85°C
Relative Humidity	10% to 80% (non-condensating)
Operating Modes	
Host Mode	According Software Protocol
Buffered Read Mode	Internal Storage of Serial Data in FIFO Buffer
Polling Mode	Of Defined Transponder Types