OBID

i-*scan*® *UHF*

**Long Range
Reader Module
ID ISC.LRMU1000**

Multi-protocol Long Range Reader Module for identification of UHF transponders (865-928 MHz) in the fields of retail, industry, logistics etc.

Features:

- Multi-protocol technology (ISO 18000-6-A/B, EPC UHF class 1, EPC UHF Gen 2)

- Connection of up to 4 external antennas

- OBID i-*scan*® ISO Host protocoll

- Heatsink including

- Interfaces: RS232, RS485

- Variants for use in Europe and North America

- Problemless Firmware-updates

OBID® **-- RFID by FEIG ELECTRONIC**

FEIG ELECTRONIC

Short description and technical information

Short description

The UHF-Long Range ReaderModule ID ISC.LRMU1000 identifies UHF transponders within a frequency range from 865 to 928 MHz and so can be used in Europe and in North America.

Licensed according to EN and FCC, in each area maximum allowed transmitting power can be realized. Due to the high maximum reading range of up to 5m with a single antenna and up to 10m with a multi-antenna application, the reader is suitable especially for Asset Management and logistical applications -- especially there, simultaneous identification of several transponders and very high reading ranges are necessary !

The multi-protocol structure of the reader (currently ISO 18000-6-A and -B as well as several EPC tags) enables already now the use of several differnt transponders and reduces in future the integration of new tags and standards, because always the same protocol structure (ISO Host) will be used.

Connection of up to 4 external antennas enables realization of multi-antenna-applications (integrated Multiplexer), two different interfaces (RS232, RS485) guarantee high flexibility to connect the reader with your individual backup-system.

The readers ISO Host Protocol is identical with the protocol of the readers within the 13.56 MHz OBID i-scan®HF reader family --

so HF- and UHF-readers can be used within the same application without additional efforts !

Technical Data

Dimensions (WxLxH)	170 x 320 x 48 mm
Power supply	12-24 V DC
Power consumption	max. 29 VA
Operating frequency	869,525 MHz ; 865,6-867,6 MHz (200 kHz-steps); 902-928 MHz (500 kHz-steps)
Transmitting power	100 mW - 4 W (100 mW-steps) 4 Watt EIRP 2 Watt ERP (0,5 Watt ERP)
Modulation	20% - 40% and 100% (scalable via Software)
Receiver	Data rates 40 - 320 kbps
Antenna connectors	4 x SMA connector (50 Ohm)
Outputs - 1 Optocoupler - 1 Relay (1x NO/NC)	24 V DC / 30 mA 24 V DC / 2 A
Inputs - 1 Optocoupler	max. 24 V DC / 20 mA
Interfaces	RS232 and RS485
Protocol modes	FEIG ISO HOST
Processable transponders	ISO 18000-6-A and -B (U-Code), EPC class 1 and Gen 2 Optional: EPC class 0
Indicators	5 LED´s
Temperature range - Operation - Storage	-25°C up to 55°C (-25°C up to 70°C) -25°C up to 85°C

Standard conformity

Radio license - Europe - USA	EN 300 220 FCC 47 CFR Part 15
EMI	EN 301 489
Safety	EN 60950
Vibration	EN 60068-2-6 10 Hz up to 150 Hz: 0,075 mm / 1g
Shock	EN 60068-2-27; Acceleration: 30g