

ID LR(M)2500 HF LONG RANGE READER

- Powerful reader for a wide range of applications
- Numerous communication interfaces: Ethernet (TCP/IP), USB, RS232, RS485, Data Clock
- Available as module or housing version
- 5 outputs / 3 inputs
- 4 different reader modes
- Different possibilities for diagnostics



The HF Long Range Readers ID LR(M)2500-A and ID LRM2500-B are the most powerful HF products of the product line IDENTIFICATION.

Due to its large number of interfaces and the flexible configuration the HF Long Range Readers ID LR(M)2500-A and ID LRM2500-B are suitable outstandigly to be used in fields of applications like retail, logistics and industry.

The readers ID LR(M)2500-A and ID LRM2500-B are licensed according to ETSI, FCC and IC and are characterized by the following features:

- High receiver sensitivity cares for an enlarged and at the same time homogeneous tag detection range
- Transmitter architecture with high resistance against incorrect cable length and disturbed power supply
- > Write/Read ranges up to 2 m (depends on the used antennas)

- Integrated diagnostic possibilities e.g. SWR meter and temperature control
- Reader protection against fault conditions like antenna shortcut and antenna mismatching
- Optical diagnostics: 5 LEDs for indication of correct function, interface communication, read events and error conditions
- Full support of all function units like multiplexer and antenna tuner for designing a gate application and constructing antenna systems of different sizes
- Supply of connected function units directly over the antenna cable
- Various configuration options for software and hardware
- Readout of RSSI data for localization of identified transponders

POWERFUL HF LONG RANGE READER

Suitable to be used in fields of applications like retail, logistics and industry.

Technical data	ID LR2500-A	ID LRM2500-A		
Dimensions (w x h x d)	320 mm x 180 mm x 110 mm	160 mm x 120 mm x 46 mm		
	(12.6 inch x 7.1 inch x 4.3 inch)	(6.3 inch x 4.7 inch x 1.8 inch)		
Weight	approx. 1.9 kg	l approx. 0.6 kg		
Color	black	l n/a		
Protection class	IP54	l n/a		
Operating frequency	13.56 MHz			
Transmitting power	2 W – 12 W (adjustable)			
Modulation	10% – 30% (adjustable)			
Power supply	24 V DC			
Power consumption	typ. 35 W			
Antenna connection	1 x SMA connector (50 Ω)			
Supply voltage on	8 V DC (max. 150 mA)			
antenna output				
Outputs	2 Optocoupler (24 V, 30 mA)			
	3 Relays (24 V, 1 A)			
Inputs	3 Optocoupler (5 V up to 24 V, 20 mA)			
Interfaces	Ethernet (TCP/IP), USB 2.0, RS232, RS485,			
	USB port for external memory st	ick		
Indicators, optical	5 LEDs for diagnosis			
Supported transponders	ISO 15693, (ISO 18000-3 MODE 1)*			
Reader modes	ISO Host Mode, Scan Mode,			
	Buffered Read Mode, Notificatio	on Mode		
Operation system	Linux (64 MB RAM, 256 MB Flash)			
Others	Anticollision function, Real time clock, RSSI data readout			
Temperature range				
Operation	–25°C up to +55°C (–13°F up to 131°F)			
Storage	–25°C up to +85°C (–13°F up to 185°F)			
Relative air humidity	5% up to 80% (non-condensing)			



ID LR2500-A



ID LRM2500-A

* e.g. EM HF ISO Chips, Fujitsu HF ISO Chips, IDS Sensor Chips, Infineon my-d, KSW Sensor Chips, NXP I-Code, STM ISO Chips, TI Tag-it

Standard conformity

Radio license			
Europe	EN 300 330		
USA	FCC 47 CFR Part 15		
Canada	IC RSS-GEN, RSS-210		
EMC	EN 301 489		
Safety & Health	EN 62368-1, EN 50364		
Vibration	EN 60068-2-6	10 Hz up to 150 Hz: 0.075 mm / 1 g	
Shock	EN 60068-2-27	Acceleration: 30 g	

Order descriptions

ID LR2500-A	HF Long Range Reader
ID LRM2500-A	HF Long Range Reader Module



POWERFUL HF LONG RANGE READER

Suitable to be used in fields of applications like retail, logistics and industry.

Technical data	ID LRM2500-B		
Dimensions (W x n x d)	160 mm x 120 mm x 46 mm (6.3 inch x 4.7 inch x 1.8 inch)		
Weight	approx. 0.6 kg		
Operating frequency	13.56 MHz		
Transmitting power	2 W – 12 W (adjustable)		
Modulation	10 % – 30 % (adjustable)		
Power supply	24 V DC		
Power consumption	typ. 35 W		
Antenna connection	1 x SMA connector (50 Ω)		
Supply voltage on	8 V DC (max. 150 mA)		
antenna output			
Outputs	2 Optocoupler (24 V, 30 mA)		
	3 Relays (24 V, 1 A)		
Inputs	3 Optocoupler (5 V up to 24 V, 20 mA)		
Interfaces	Ethernet (TCP/IP), USB 2.0, RS232, RS485, Data Clock		
Indicators, optical	5 LEDs for diagnosis		
Supported transponders	ISO 15693, (ISO 18000-3 MODE 1)*		
Reader modes	ISO Host Mode, Scan Mode (HID-Interface),		
	Buffered Read Mode, Notification Mode		
Others	Anticollision function, RSSI data readout		
Temperature range			
Operation	–25°C up to +55°C (–13°F up to 131°F)		
Storage	–25°C up to +85°C (–13°F up to 185°F)		
Relative air humidity	5% up to 80% (non-condensing)		

* e.g. EM HF ISO Chips, Fujitsu HF ISO Chips, IDS Sensor Chips, Infineon my-d, KSW Sensor Chips, NXP I-Code, STM ISO Chips, TI Tag-it

Standard conformity

Radio license

Europe	EN 300 330		
USA	FCC 47 CFR Part 15		
Canada	IC RSS-GEN, RSS-210		
EMC	EN 301 489		
Safety & Health	EN 62368-1, EN 50364		
Vibration	EN 60068-2-6	10 Hz up to 150 Hz: 0.075 mm / 1 g	
Shock	EN 60068-2-27	Acceleration: 30 g	

Order description

ID LRM2500-B

HF Long Range Reader Module



ID LRM2500-B



POWERFUL HF LONG RANGE READER

Suitable to be used in fields of applications like retail, logistics and industry.

Variants	ID LR2500-A	ID LRM2500-A		ID LRM2500-B
Version	Housing	Module		Module
Dimensions (w x h x d)	320 mm x 180 mm x 110 mm	160 mm x 120 mm x 46 mm		160 mm x 120 mm x 46 mm
	(12.6 inch x 7.1 inch x 4.3 inch)	(6.3 inch x 4.7 inch x 1.8 inch)		(6.3 inch x 4.7 inch x 1.8 inch)
Interfaces	Ethernet (TCP/IP), USB 2.0, RS23	2, RS485,		Ethernet (TCP/IP), RS232, USB 2.0
	USB port for external memory st	ick		(HID-Interface), RS485, Data Clock
Operation system	Embedded Linux (64 MB RAM, 25	6 MB Flash)		n/a
	allows installation of individual	application software		
Supported transponders	ISO 15693 (ISO 18000-3 MODE 1) H	HF EPC Gen2 (prospective)		ISO 15693 (ISO 18000-3 MODE 1) NXP I-Code 1
Buffer size				
Buffered Read Mode	10,000 data sets			100 data sets
Notification Mode				
Real time clock	Accuracy: ±l s/day; power rese	rve:lday		n/a
Anticollision	60 tags/s			40 tags/s
Applications	High tag population (> 25)			Low up to middle tag population (< 25)

