ID MR103 / ID MRM103

HF MID RANGE READER

- Compact Multitag Reader for various applications
- Anti-collision function
- 1.5 W RF-Output power
- Numerous communication interfaces:
  Ethernet (TCP/IP), USB Powered, USB, RS232
- Available as module or housing version
- 3 different reader modes
- Compatible with the previous version ID ISC.MR102
- Ideal for retail, industry, logistics and libraries

HF Mid Range Reader

The HF Mid Range Reader ID MR103 identifies transponders according to ISO 15693 with an operating frequency of 13.56 MHz. The reader is suitable for applications with middle read ranges. Depending on the used antenna the ID MR103 has a read range up to 40 cm.

Due to its numerous communication interfaces the HF Mid Range Reader ID MR103 is suitable to be used in fields of applications like library, retail, logistics and industry and is easy to integrate in existing systems.

With its anti-collision function the ID MR103 is able to read up to 30 transponders simultaneously. A switchable DC voltage at the antenna output can supply a LED inside a connected antenna.

Depending on the interface the ID MR103 is available as module or housing version. For the housing version the electronic is mounted inside a solid plastic housing which could be used in industrial environments.

HF MID-RANGE READER

for Read Range up to 40 cm.

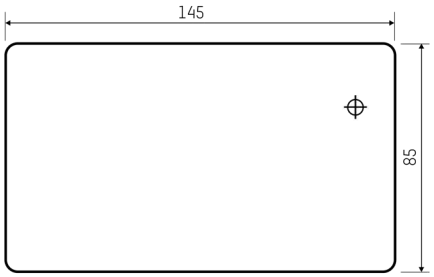
Technical data

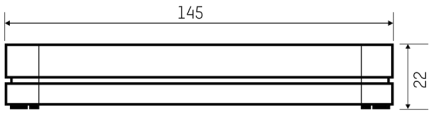
Dimensions (w x h x d)	
MR103	145 mm x 85 mm x 22 mm
MRM103	145 mm x 77 mm x 17 mm*
Weight	
MR103	150 g
MRM103	56 g
Housing	Plastic ABS
Colour	
Housing	similar to RAL 9016 (traffic white)
Color front film	similar to RAL 9017 (traffic black)
Protection class	
MR103	IP30
MRM103	-
Operating frequency	13.56 MHz
Transmitting power	
Standard	1.2 W ± 1 dB
High Power	1.5 W ± 1 dB
Power supply	
ID MR103-A/-USB	12 V DC up to 24 V DC
ID MRM103-A/-USB	12 V DC up to 24 V DC
ID MR103-E	12 V DC up to 24 V DC
ID MR103-USBC	via USB Type-C Current @1.5 A
Power consumption	max. 6 W
Antenna connector	1 x SMA connector (50 Ω)
Supply voltage at antenna output	5 V (5 mA)
Interfaces	
ID MR103-A	RS232
ID MR103-E	Ethernet (TCP/IP)
ID MR103-USB	USB 2.0
ID MR103-USBC	USB 2.0
Indicators, optical	1 LED (multicolored)
Supported transponders	ISO 15693 / ISO 18000-3 Mode 1**, I-Code 1
Reader modes	ISO Host Mode, Scan Mode, Notification Mode*
Others	Antenna shortcut detection, Temperature control, Full support of the external multiplexer ID ANT.Mux.5
Temperature range	
Operation	–25 °C up to +55 °C
Storage	–40 °C up to +85 °C
Relative air humidity	5 % up to 95 % (non-condensing)

* Depending on the variant

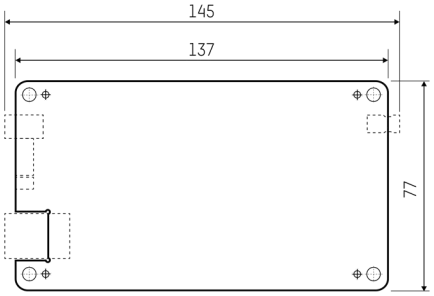
** e.g. EM HF ISO Chips, Fujitsu HF ISO Chips, IDS Sensor Chips, Infineon my-d, KSW Sensor Chips, NXP I-Code, STM ISO Chips, TI Tag-it

ID MR103-A





ID MR103



ID MRM103

HF MID-RANGE READER

for Read Range up to 4 0 cm.

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 up to 150 Hz: 0.075 mm / 1 g
Shock	EN 60068-2-27	Acceleration: 30 g

Order description

ID MR103-A	Housing version; RS232 asynchr.
ID MRM103-A	Module version; RS232 asynchr.
MR103-E	Housing version; Ethernet
ID MR103-USB	Housing version; USB 2.0
ID MRM103-USB	Module version; USB 2.0
ID MR103-USBC	Housing version; USB 2.0 powered via USB Type-C Conector