

MultiTag reader module for ISO 14443 and ISO 15693 transponders

The CPRM02 identifies both, ISO 14443 (Proximity) and ISO 15693 (Vicinity) transponders. Customers can now rely on a single reader to support the international standards for both, proximity and vicinity transponders using this multi-compatible module. The module has a small footprint of 50 x 50 mm with an integrated antenna.

The reader has a maximum reading distance of 90 mm when identifying ISO 15693 transponders, widely used in Smart Labels and features the Standard MultiTag Protocol (SMP). SMP permits the device to auto-discriminate transponders from a wide variety of producers (I.CODE[®] from Phillips Semiconductors, Tag-it[™] from Texas Instruments, my-d from Infineon and ST/LRI512 from ST Microelectronics) and to identify multiple transponders simultaneously.

The reader supports the ISO 14443 encryption and security functions found in Phillips' Mifare[®] and Infineon's my-d transponders, in addition to the Mifare[®] UltraLight and ST Microelectronics ST/Sr176.

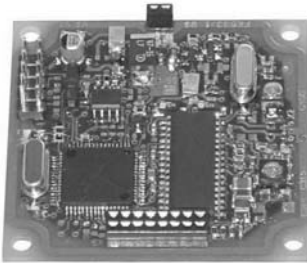
The security functions prevent unauthorized access to the data transfer between the reader and the transponder, particularly critical in payment and ticketing applications. The device has a maximum read range of 40 mm for ISO 14443 tags, depending of the size of the antenna inside a card or Keyfob.

The initial product was released with an RS-232 TTL serial interface and a data/clock interface.

Features:

- OnBoard antenna. external antenna is optional available in different sizes
- RS.232-TTL- and Data/Clock interface
- identifies transponders of both ISOP standards simultaneously
- supports encryption and security functions of well known 13.56 MHz-transponders fits best for sensitive applications like ticketing und payment





Technical Specifications

Standards	RF Europe USA EMV Europe Security Europe	EN 300 330 FCC 47 CFR Part 15 EN 301 489 EN 60950
CPRM02	Technical Data	
Supported Transponders	ISO 15693	I.CODE.SL2 Tag-it HFI my-d vicinity STM LRI512
	ISO 14443 A and B	Mifare Standard Mifare Ultra light my-d proximity [Infineon] STM SR176
	Philips Semiconductors	I.CODE.SL1 with
	MIFARE my-d	integrated optional
Antenna	Integrated external Antenna	Onboard optional
Reading Distance	ISO 15693-Transponder ISO 14443-Transponder	90 mm 40 mm
Operating Frequency	13,56 MHz	
RF-Transmission Power	250 mW	
Host Interface	RS.232.TTL RS.485 optional Data/Clock optional	
User Interface	2 LED	
Memory	EEPROM	1 kB (10.000 WriteCycles)
	FLASH	64 kB
Environment	Temperature Operating	-20° - +70° C
	Storage	-40° - +85° C
	Humidity Operating	20% - 80% non condensing
	Storage	20% - 90% non condensing
Dimensions		50 mm x 50mm x 10mm [W x H x D]
Weight		15 gr
Power	Operating Voltage	5 V DC +5%/-1%
	Operating Current	280 mA max.