

1-Wire 125kHz RFID Reader

Data Sheet v1.0
2016-10-24



- Radius 15,5 mm, width 7 mm
- 1 - Wire interface
- Bicolor signaling LED
- Wide application range






Technical specification

Power supply	6,5V - 30 V DC
Average current consumption	12mA (without LED)
Green LED current	10 mA
RED LED current	10 mA
Data coding	Manchester, 64 cycles per bit
Interface (on Ruptela devices)	1 - Wire
Radio frequency	125 kHz
Card type	UNIQUE, standard ² LF cards
Reading distance	~4 cm

¹Must be connected to an external power source, FM1-Wire interface power output voltage is limited to 5 VDC.

²LF - low frequency

Pinout

Yellow		Power supply +
Grey		Power supply -
White		1 - Wire DATA
Green		Green LED cathode (-)
Brown		Red LED cathode (-)

Operation description

1-Wire RFID users should take notice, that ID written on the card is different from the ID that is sent to the server by the FM device. The read-out UID data are sent through 1-wire bus, emulating Maxim (Dallas) 1990A iButton. In case of transponders with UID longer than 4 bytes and up to 6 bytes, the oldest 2 bytes UID[4] and UID[5] are sent as 0x00 (zero).

control sum	constant value	producer's code	serial no.	code DS1990A
CRC	0x00	1 byte	4 bytes	0x01
MSB				LSB

Physical properties

Radius, mm	15,5
Width, mm	7
Connection	1-Wire
Housing	Plastic

Contacts

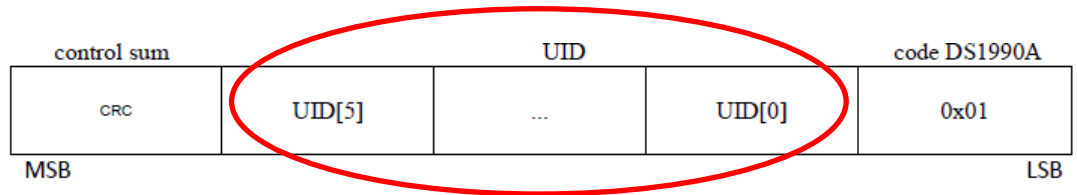
T. +370 5 272 65 70
M. info@ruptela.com
W. ruptela.com

1-Wire 125kHz RFID Reader

Data Sheet v1.0
2016-10-24



Whereas for UID with length of 7 or more, are truncated to the 6 most significant UID bytes.



Legal information

Copyright © 2016 Ruptela. All rights reserved. Reproduction, transfer, distribution or storage of parts or all of the contents in this document in any form without the prior written permission of Ruptela is prohibited. Other products and company names mentioned in this document are trademarks or trade names of their respective owners.

Physical properties

Radius, mm	15,5
Width, mm	7
Connection	1-Wire
Housing	Plastic

Contacts

T. +370 5 272 65 70
M. info@ruptela.com
W. ruptela.com