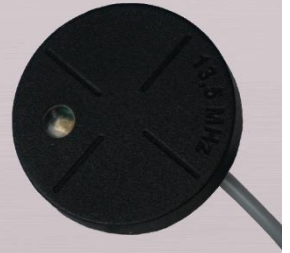


# 1-Wire 13.56MHz RFID Reader

Data Sheet v1.4  
2020-04-20





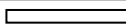


- Radius 17mm, width 6 mm
- 1 – Wire interface
- Bicolor signaling LED
- Wide application range

## Technical specification

Power supply	16.5V – 30 V DC
Average current consumption	15mA (without LED)
Green LED current	7 mA
RED LED current	7 mA
Max. receive current	45 mA (without LED)
Interface (on Ruptela devices)	1 - Wire
Radio frequency	13.56 MHz
Card type	Compatible with ISO/IEC 14443-3-A standard
Reading distance	~4 cm

<sup>1</sup>Must be connected to an external power source, FM 1-Wire interface power output voltage is limited to 5 V DC.

## 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 17  
 Width, mm 6  
 Connection 1-Wire  
 Housing Plastic

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

# 1-Wire 13.56MHz RFID

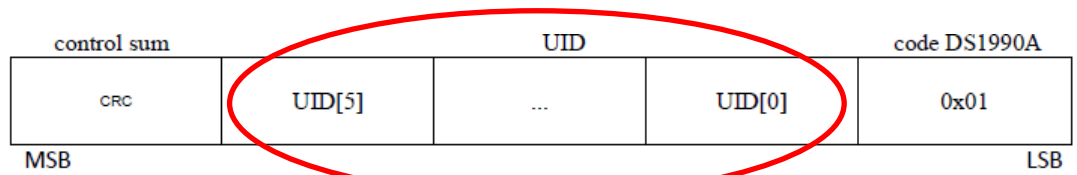
## Reader

Data Sheet v1.4

2020-04-20



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



### Legal information

Copyright © 2020 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.

#### Contacts

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

#### Physical properties

Radius, mm 17  
Width, mm 6  
Connection 1-Wire  
Housing Plastic