Ruptela
Transport Telematics

1-Wire 13.56MHz RFID Reader

Data Sheet v1.3

2017-04-14

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

Technical specification

Power supply	[1]6V - 16 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

[1]Must be connected to an external power source, FM 1-Wire interface power output voltage is limited to 5 V DC.

Physical properties

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

Contacts

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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

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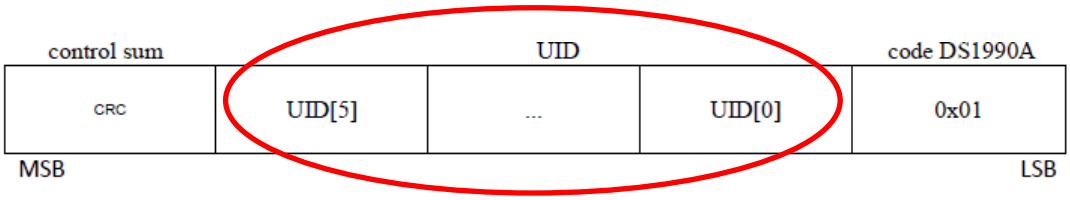
Whereas for UID with length of 7 or more, are truncated to the 6 most significant UID bytes.



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Legal information