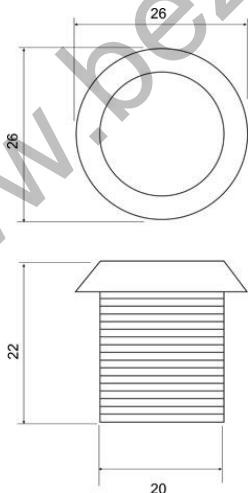# mini iButton Card Reader User Manual

The reader is sealed and is not afraid of water and dust. Degree of protection IP65

Case material is Polyamide. It is a good conductor of heat and melts at a high temperature. So when you set it on a metal surface he is not afraid of fire, because he manages to convey all the warmth of the metal surface .
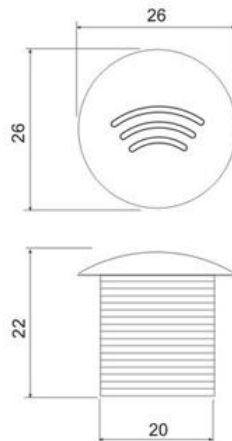
The size of the reader is only 25 mm. It is above the surface only 3 mm. It cannot be brought down from the surface.

The reader is impossible to remove from the outside. And even the destruction of his body impossible to gain access to the conductors with which it is connected.
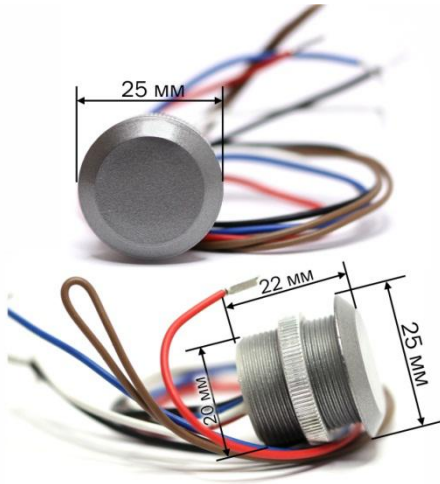
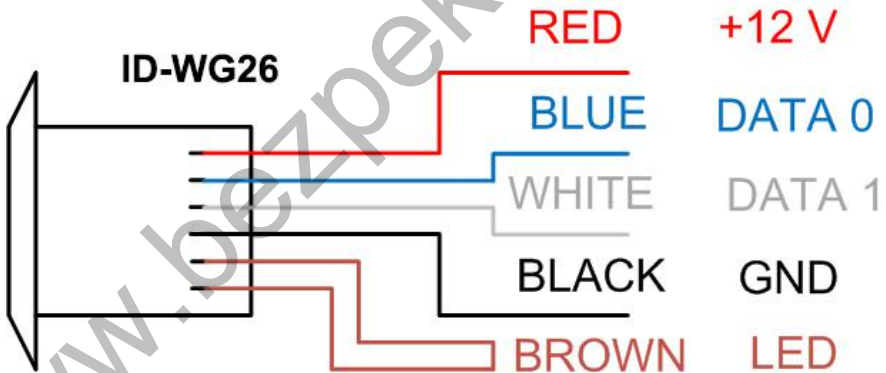## Reader EM Marine

Reader Mifare

ID-WG26 iButton Card Reader

Range of card reading to 2-6 cm
Protocol for connection to the controller: Wiegand 26
Power supply: 6 - 18 VDC
Current consumption: 35 mA
Light indication: Red LED
Housing material: Polyamide

PURPOSE OF PINS

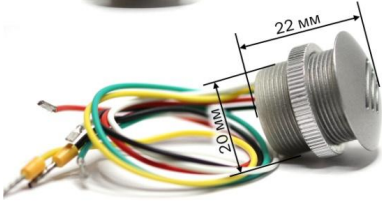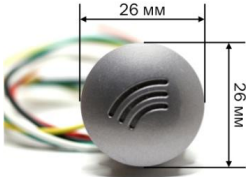| ID-WG26		
RED	+12 V
BLUE	DATA 0
WHITE	DATA 1
BLACK	GND
BROWN	LED

In standby mode, there is a red light.
At the moment of touch by key fob, the red light will turn off for one second.
While the card close to the reader, the light indication is disabled.

IC-WG26 iButton Card Reader

Operating frequency: 13.56 MHz
Type readable cards: Mifare, Ultralight, 1K, 4K, Plus
Range of card reading to 2-6 cm
Protocol for connection to the controller: iButton
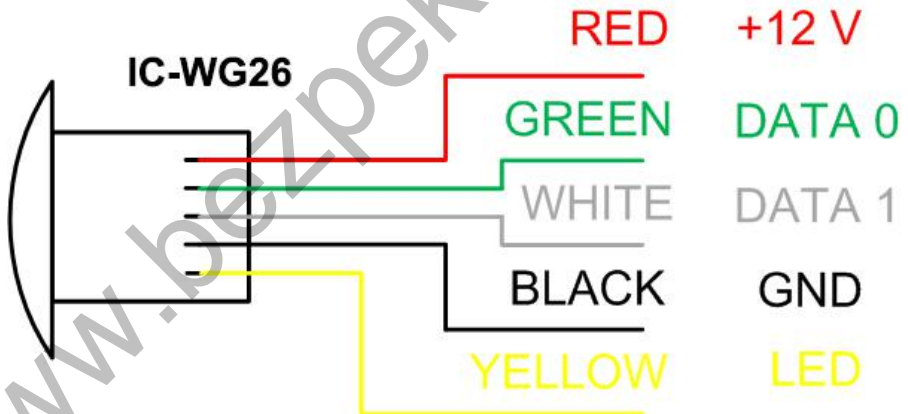(Dallas Touch Memory, emulation DS1990A),
Wiegand 26
Power supply: 6 - 18 VDC
Current consumption: 35 mA
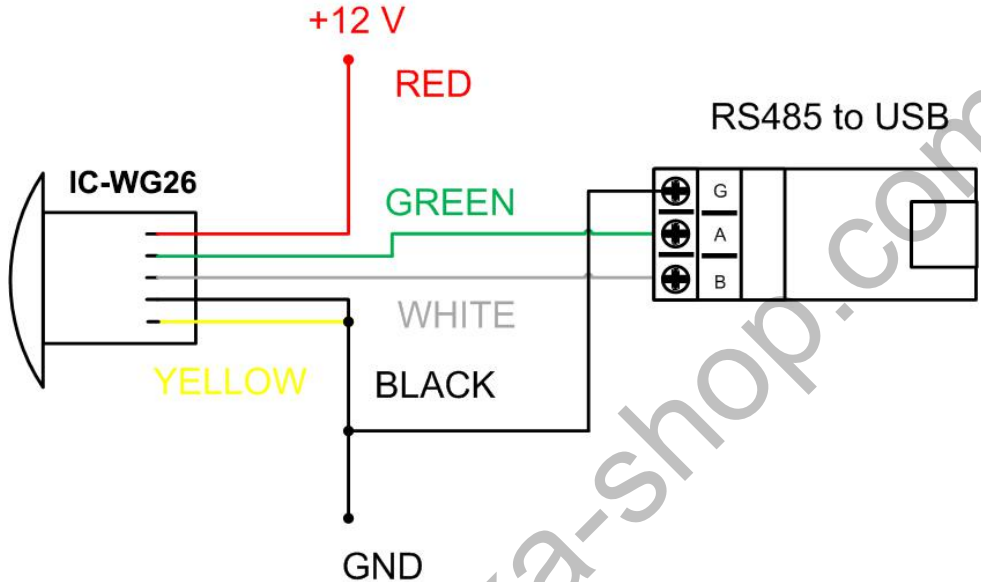Light indication: Red LED
Housing material: Polyamide

PURPOSE OF PINS

IC-WG26

RED	+12 V
GREEN	DATA 0
WHITE	DATA 1
BLACK	GND
YELLOW	LED

In standby mode, there is a red light. At the moment of touch by key fob, the red light will turn off for one second. If you connect the yellow wire (LED) with less power (GND) the led will shine only when read key fob.

Connection to RS485

You can change the settings of the reader.
- Wiegand 26, 34, 42
- direct or reverse order of transmission bytes
- turn on or off XOR of all bytes and record result in the high byte
- ignore bytes until the number

The reader can operate in four modes:
1. Reader – only reading of the card number.
2. Reader – read/write protected area of the memory the card. To work in this mode require a Converter RS485 – USB, PC and software. A free SDK is available on request.
3. Reader in protected mode. Only reads "your card". Unique in our system is that the you can create "your cards" and "your readers" . This can be done without a computer, simple and free.
4. Reader + controller in protected mode. It divides the cards on "your" and "others". So the permission to pass is stored in the memory the card, number of cards and the number of gates in the system is not limited. If this is "your" card, then "your" reader gives a command to open the lock.

The logic of the reader can be changed by writing a new firmware

Mounted base

RFID-125KHz Mounted Reader

Mifare-13.56MHz Mounted Reader