



GLOBAL DISPLAY SOLUTIONS

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Description	User Manual - Remote MIFARE Board
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**This technical literature is subject to change without notice.
Please contact GDS or its representative before designing your product based on this specification**



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1. FCC Notice (U.S. Only)

FCC Class B

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the manufacturer's instruction manual, may cause interference with radio and television reception. This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1 This device may not cause harmful interference.
- 2 This device must accept any interference received, including interference that may cause undesired operation.

NOTICE: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference with radio or television reception, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna.
- Relocate the system with respect to the receiver.
- Move the system away from the receiver.
- Plug the system into a different outlet so that the system and the receiver are on different branch circuits.

If necessary, consult a representative of Technogym SpA or an experienced radio/television technician for additional suggestions.

The following information is provided on the device or devices covered in this document in compliance with the FCC regulations:

- Product name: Remote MIFARE board
- Model number: BRD01794 - 0WQ00485AB
- Company name: Global Display Solutions SpA

2. Safety Instructions

The Remote MIFARE board is a Mifare reader module of the Technogym Devices Technogym Device (Equipment Cardio, Trainer point or Class Reader).

Read the Safety Instruction carefully and keep it for use later.

Beware of all warning and instruction signs marked on the Remote MIFARE board.

Ensure that the ambient temperature around the module is between +5°C and +50 °C (with relative humidity between 5% and 85%).

3. Mechanical dimensions

The electronic board has all components on one side only and the connectors must be of type SMT.

The Remote MIFARE board shows the following mechanical dimensions:

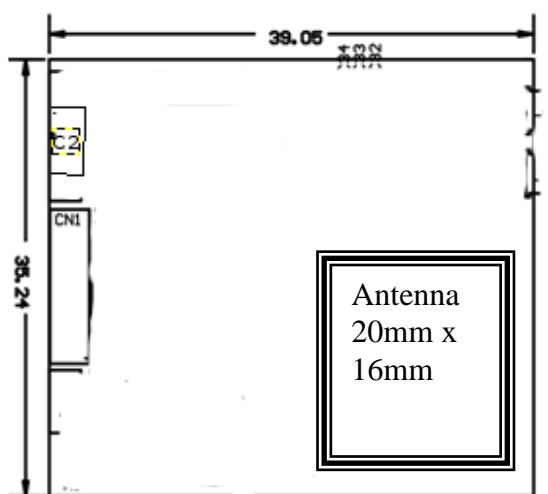


Figure 1 Remote MIFARE board mechanical dimensions

4. Connections

The Remone Mifare board has the main connector (Picoblade Molex SMT - 53398-087) with reference J9.

Pin	Function	Description
1	+3.3Vdc	Power Supply
2	UART_TX	Serial Data Out
3	UART_RX	Serial Data In
4	NC	RTS out
5	NC	CTS in
6	NC	Relè out
7	NC	NC
8	GND	Ground

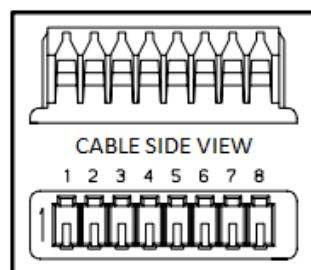


Figure 2 J9 connector details

5. Operating mode

The Remote MIFARE board operates with both user keys based on Mifare protocol (TGS Mifare and MyWellness key). The minimum reading distance with Mifare devices must be at least 15 mm.

In the case of interaction with user key based on Mifare protocol, the board traces its operating states, based on the use of fitness equipment by the athlete (eg, running a year) and through some parameters collected from the user keys.

6. Labelling

The Remote MIFARE board has labeling showing FCC ID code, GDS SpA board code and Technogym SpA codes.



Figure 3 Remote MIFARE board labelling

Using a permanently affixed label, the modular transmitter is labelled with its own FCC identification number, and,

if the FCC identification number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module.

This exterior label can use wording such as the following:

“Contains Transmitter Module FCC ID: XZRBRD01794 or contains FCC ID: XZRBRD01794”.

Any similar wording that expresses the same meaning may be used.