



SOCIETÀ COOPERATIVA  
**BILANCI**AI



WEIGHT REPEATER

# RD 100HL

USE AND MAINTENANCE MANUAL

81320482

REV. 1.1 19/12/2016

# DECLARATION OF CONFORMITY EU

**SOCIETA' COOPERATIVA BILANCIAI A.R.L.**

We:

**Via S. Ferrari, 16**

**41011 Campogalliano (MO) - Italia**

declare upon our sole responsibility that the following product:

**RD 100HL electronic weight repeater terminal and relative options,**

to which this declaration refers, complies with the following standards

**2014/30/EU (EMC) : EN 61000-6-3:2007**

**EN 61000-6-4:2007**

**2014/35/EU (LVD) : EN60950-1:2006**

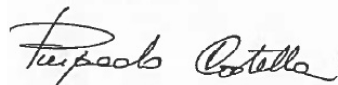
The terminal is suitable for non-automatic weighing instruments approved by means of a "CE Certificate for Type Approval", in compliance with Directive 2014/31/EU.

The product features CE marking.

Campogalliano, 02/05/2016

**Division Manager**

**BILANCIAI GROUP**  
Direttore Operations  
Ing. Pierpaolo Castellani



## Description of equipment

The RD100HL display is a weight repeater with six 10 cm-high digits, featuring high-brightness LED, suitable for outdoor installation and also visible against sunlight.

The display is installed in a stainless steel case with red Plexiglas front panel. It can be wall mounted by means of a stainless steel bracket, to be fixed to the wall with at least 2 screw anchors of a type that is suitable for the type of wall.

The connector for connection is on the rear left side of the case. Cables lead downwards to prevent water seeping in

The display's inclination can be adjusted by means of the two threaded knobs that secure it to the fixing bracket.

The display adapts brightness of digits to the conditions of light, i.e. brightness reduced at night and increased in the event of strong outdoor light.

## Specifications

- Digits displayed 6
- Range 0 – 999999
- Display 4" (100 mm), LED
- Decimal point automatic
- Receive timeout 5 seconds
- Transmission RS 232 - RS 485 - RS 422
- Power supply 220V by means of a transformer,  
24 Volts AC/DC max. 2 amp
- Temperature range -10 + 40 °C
- IP protection rating 65
- Overall dimensions 190 x 690 x 150 mm (bracket included)
- Weight 2 kg

# INSTALLATION

The instrument must be installed by trained staff, which is able to work both on the weighing components and on the electrical/mechanical parts.

Choose the place of installation, bearing in mind the following requirements:

- Maximum distance from the weighing terminal: 100 metres
- Minimum distance from ground is approx. 3 metres, so that the terminal is protected against acts of vandalism.
- Install the terminal in a sheltered position with respect to rain and direct sunlight. This will prevent damp forming, damage to the case and exposure to high temperature.
- Install the transformer in a dry and sheltered place.
- Protect the transformer with a residual-current device, the characteristics of which must comply with standards in force.
- Install by securing the bracket in place with 3 screw anchors having a diameter of 8 or 10 mm.
- Connect the cable to the display and make sure it is in working order.
- Secure the display to the bracket using the 2 threaded knobs provided
- Adjust inclination of the display to make the digits as visible as possible.

## DISPLAY CONNECTION

### RS232

WEIGHT CONNECTOR	TERMINAL	MEANING	RD100HL STEEL CONNECTOR
	PIN 3	TX RS 232	PIN 1
	PIN 5	GND	PIN 4

### RS422

PIN 7	TX - RS 422	PIN 1
PIN 9	TX +RS 422	PIN 4

## SERIAL COMMUNICATION

PROTOCOL                      BILANCIAI ESTESO, CYCLIC

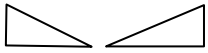
SERIAL DATA                baud 4800, bit 7, stop 2, parity even

## 24 VOLT POWER SUPPLY

24 VOLTS AC/DC WITHOUT POLARITY              PIN 2 -3 DISPLAY

SHIELD + GROUND                                      GROUND PIN

## SYMBOLS AND ALARMS



STABLE WEIGHT



ZERO WEIGHT (  $\pm \frac{1}{4}$  OF THE DIVISION)

PT

TARE ON

T

TARE SAVED

GROSS

GROSS WEIGHT

NET

NET WEIGHT

IF “no data” APPEARS ON THE DISPLAY, THE SAME HAS NOT BEEN RECEIVING ANY INFORMATION FROM THE TERMINAL FOR AT LEAST 5 SECONDS.

MAKE SURE THE TERMINAL IS ON AND THAT IT IS DISPLAYING A WEIGHT.  
CHECK CONNECTION OF CABLE AGAIN.