

1. Description

The Truck iQ™ is one of the latest “iQ” devices from EnerSys®. The device consists of a display powered by the battery via the truck cables. It reads in real time and wirelessly data from the Wi-iQ3®, displaying alerts, alarms, State of Charge and other useful parameters to optimise the operation of the battery.

2. Mechanical installation

2.1 Install the Truck iQ fixing bracket (supplied) on the most suitable part of the truck dashboard. Note, the device should be mounted in a position that will protect it from collision with external obstructions.

2.2 The bracket can be assembled in various ways to allow a multitude of mounting configurations (see Figure 1).

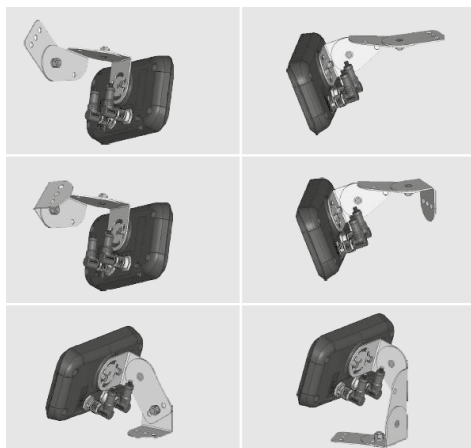


Figure 1: Bracket configurations

2.3 Connect the supply cable pins on the +VBAT and -VBAT on the battery or on the truck side (see Figures 2 & 3). Nominal battery voltage: 24 - 96V

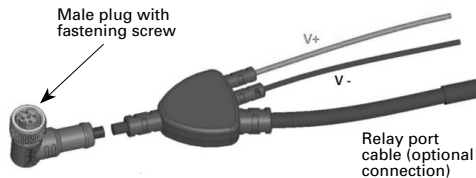
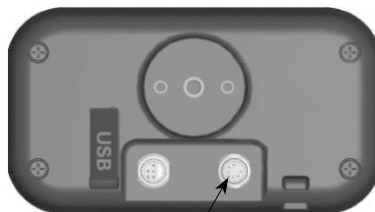


Figure 2: Supply cable



Figure 3: Power Pin on the supply cable

2.4 Plug the male connector into the right female socket situated on the rear side of the Truck iQ (see Figure 4).



Female socket for supply cable

Figure 4: Rear of Truck iQ and socket for supply cable highlighted

2.5 Turn the “fastening screw” on the connector to lock the supply cable to the Truck iQ.

2.6 Power the Truck iQ by connecting the traction battery to the truck.

3. Handshake with Wi-iQ3

The Truck iQ can be paired with the Wi-iQ3 either manually or automatically.

Manual procedure:

Setting -> I/O -> Pairing -> Disable Auto pairing.

Select the appropriate Wi-iQ3 device by clicking on the BLE (Bluetooth) icon.

NB: The Wi-iQ3 device is normally equal to the battery name.

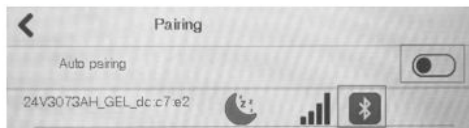


Figure 5: Setting and Pairing Screen

Auto Pairing:

Setting -> I/O -> Pairing -> Enable Auto pairing.

The device will pair automatically with the Wi-iQ3 connected to the traction battery which is powering the Truck iQ.

4. Display

The Truck iQ™ has a Display Touch Screen TFT 4.3 inch. There are multiples screens available:

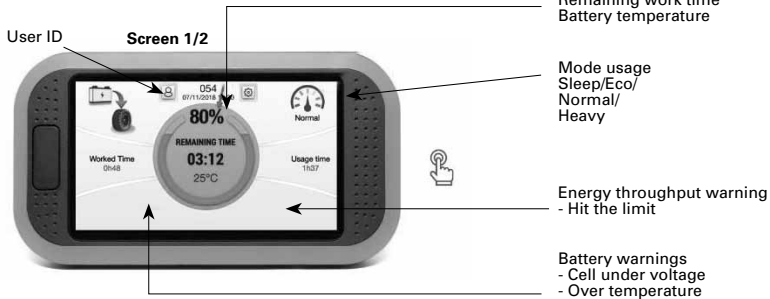


Figure 5: Screen 1



Warning screen (low state of charge)



Critical state of charge limit



Screen during charge (if powered)



Screen when there is no Wi-iQ3 connection

Figure 6: Screen 2



Battery information tab



Battery state of health tab



Truck data tab



Warning tab

5. Use and conditions

- 5.1** The Truck iQ™ is a data display designed to be installed on an industrial forklift truck. **2.** The assembly must be carried out with the battery disconnected.
- 5.2** Input voltages: 15 – 120VDC.
- 5.3** Temperature range: 0°C to 70°C.
- 5.4** Altitude: <2000m.
- 5.5** Pollution level protection: 3 dusty environments.
- 5.6** Technical support: refer to www.enersys.com to find your local contact.

6. Buzzer

The Truck iQ is equipped with a sound buzzer. The buzzer will warn the user to critical State of Charge battery.

SoC (State of Charge)	Buzzer	Stop condition
Warning	3 bips every 30s	Normal SoC
Alert	3 bips every 5s	Normal SoC

7. Warning

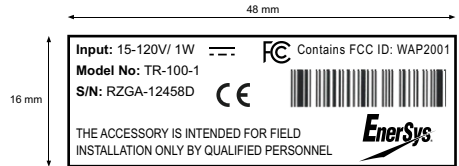
The Truck iQ will display warnings:

ICON	Description	Stop condition
	Warning activated	Check on screen 1
	High temperature	Stop and cooldown the battery
	Low water level	Top up the battery
	Cells unbalance	Stop, charge and equalise the battery cells
	Energy throughput too high	Stop, and cooldown the battery

8. Warranty

Warranty is offered by the manufacturer based on local regulations. Please contact your local distributor for further information.

9. Information plate



10. Certifications

CE EnerSys hereby declares that the device conforms to the descriptions laid down in European Directives:

- **Directive 2014/30/EU:**
Electromagnetic Compatibility
European standard:
- NF EN 12895: (2015-12)
- **Directive 2014/35/EU:**
Low Voltage Directive
European standard:
- EN 60950-1 : 2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013 - Information Technology Equipment –Safety
- **Directive 2014/53/EU:**
Radio Equipment
European standard:
- ETSI EN 301 489-1 V2.1.1 (2017-02)
- ETSI EN 301 489-17 V3.1.1 (2017-02)
- ETSI EN 300 328 V2.1.1 (2016-11)