

The Veratron logo features the word "veratron" in a lowercase, sans-serif font, followed by a stylized white 'V' symbol that resembles a downward-pointing triangle with a small notch at the top.

veratron 

The background of the slide is a dark, high-contrast image of a speedometer. The needle is positioned between the 90 and 120 marks. The numbers 60, 90, and 120 are clearly visible on the dial. The overall aesthetic is technical and industrial.

# LINK UP GATEWAYS

Product presentation



# 01

## PRODUCT OVERVIEW

# PRODUCT OVERVIEW / USP

- ▼ **Single-function gateways to upgrade every sensor to NMEA 2000 compatible**
- ▼ **Five variants available:**
  - ▼ **Generic resistive 0-400Ω**
  - ▼ **0-5V for Temp/Press sensors**
  - ▼ **Pyrometer**
  - ▼ **J1939**
  - ▼ **Intelligent Battery Sensor (IBS)**
- ▼ **Powered from NMEA 2000, so no external power supply is required**



# EXAMPLE USE CASES

## CAN Engine (J1939 Link Up variant)



## Intelligent Battery Sensor (LIN Link Up variant)



## Fuel sensors (resistive Link Up variant)



# DEVICE CONFIGURATION - WIRELESS

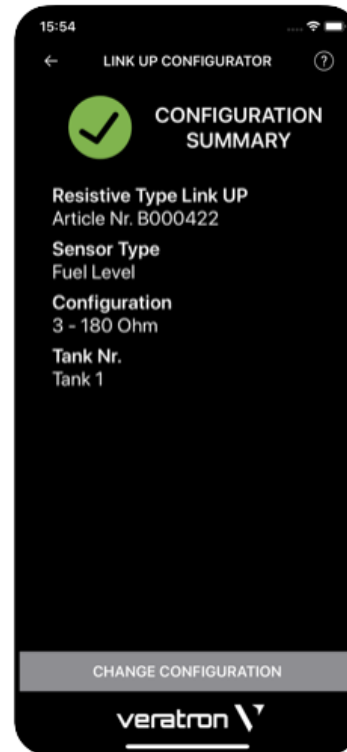
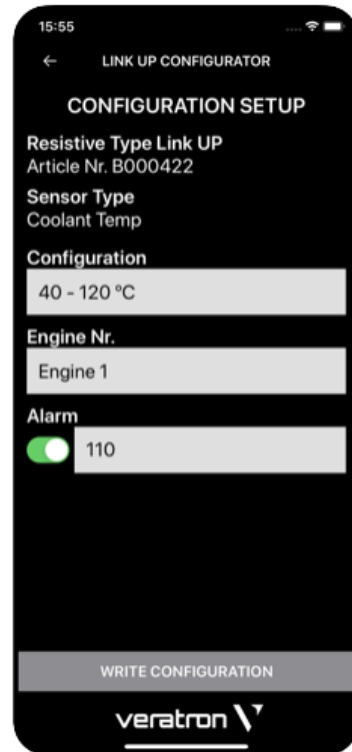
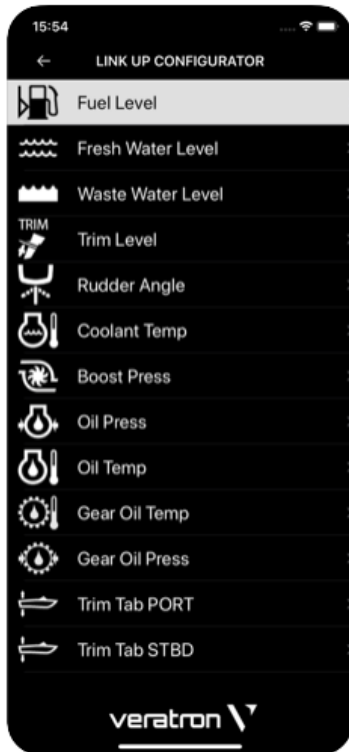
- ✔ **User-friendly configuration through contactless interface and “Link Up configurator” smartphone App**
- ✔ **Simply setup the parameters of your sensor and then “tap” your smartphone onto the dedicated area of the device to configure it instantly**
- ✔ **Thanks to its passive receiver tag the device does not need to be powered to be programmed!**

## Common configurable parameters:

- ✔ **Sensor type**
- ✔ **Sensor instance**
- ✔ **Warning threshold**



# LINK UP CONFIGURATOR APP

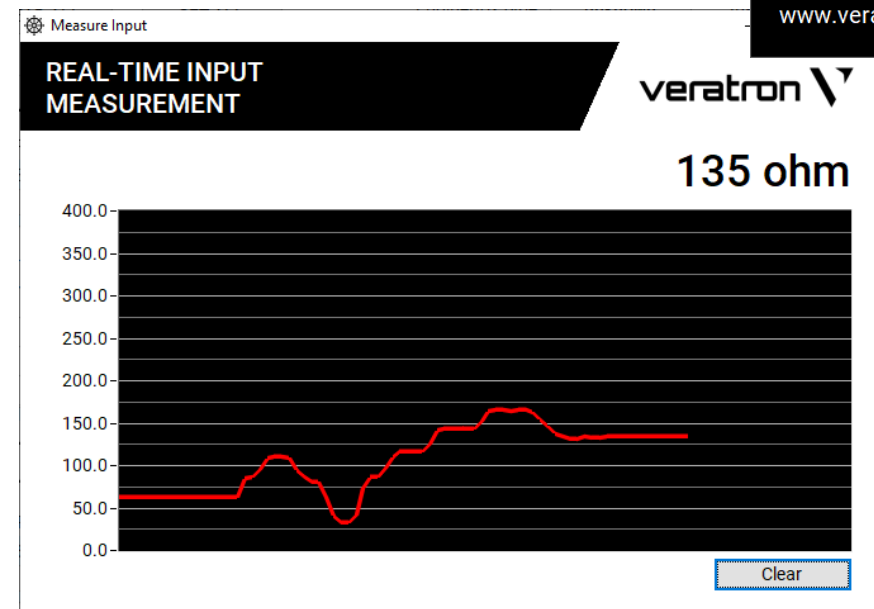
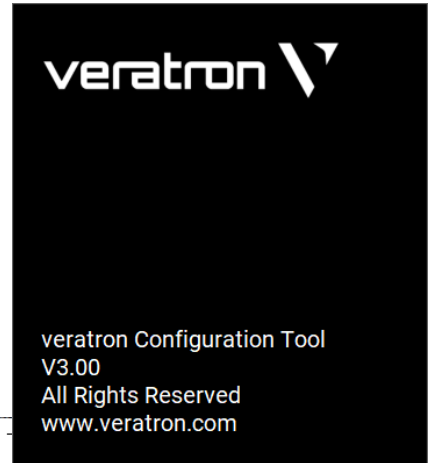
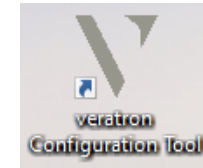


Link Up  
configurator



# DEVICE CONFIGURATION - PC

- ▼ The configuration is also possible via NMEA 2000 with PC Configuration Tool
- ▼ This also allows for real-time reading of the analogue signal
- ▼ The LED on the device will turn on to notify the user which Link Up is being configured



# EXAMPLE WITH LEVEL SENSORS



Type = FUEL  
Tank No. = 1



Type = FUEL  
Tank No. = 2



Type = FUEL  
Tank No. = 3

A multifunction display can show all the three tank level values



NMEA 2000® network



- ▼ **The output connector is the standard NMEA 2000 Micro-C M12 5 pins across all the variants**

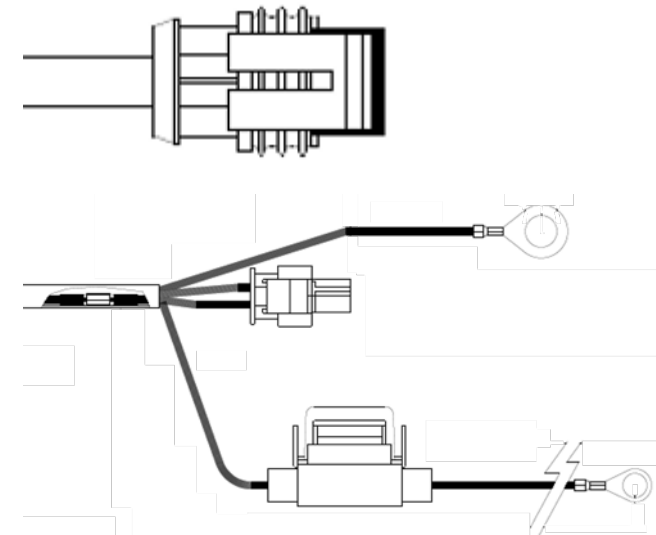
## INPUT CABLES

### Resistive, J1939, 0-5V and pyrometer variants

- ▼ AMP Super Seal 2 poles for a plug-and-play installation with VDO sensors (like liquid level sensors)

### Intelligent Battery Sensor variant

- ▼ Dedicated harness to interface the IBS (Hirschmann connector) and the battery poles (ring-type M8 faston)



02

INTELLIGENT BATTERY  
SENSOR

- ▼ **Intelligent Battery Sensor (IBS) to reliably and accurately measure the battery parameters like voltage, current and temperature**
- ▼ **It also calculates the battery condition parameters like State Of Charge (SOC), State Of Health (SOH) and State Of Function (SOF)**
- ▼ **IBS is offered as a kit together with Link UP gateway for an effortless NMEA 2000 integration**



## State Of Charge (SOC)

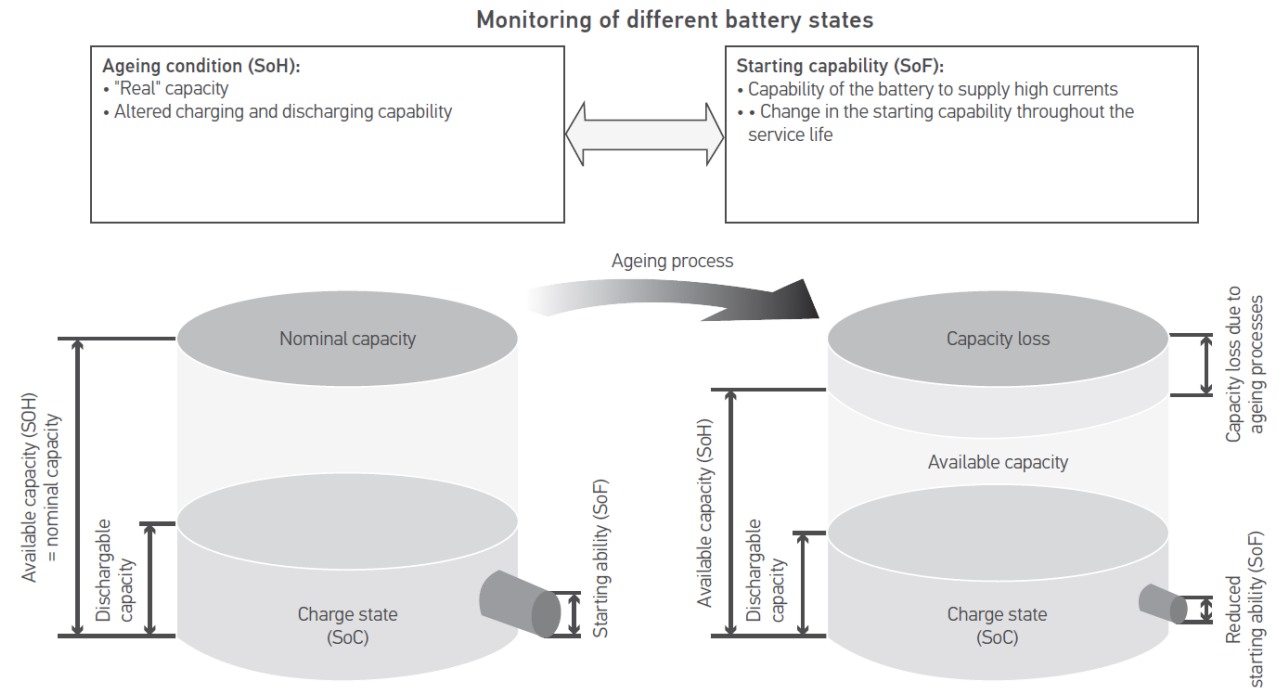
Current charge status of the battery, defined in percentage

## State Of Health (SOH)

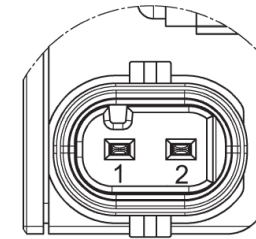
Ageing status of the battery, defined in percentage

## State Of Function (SOF)

Future cranking health of the engine based on the currently measured current and voltage



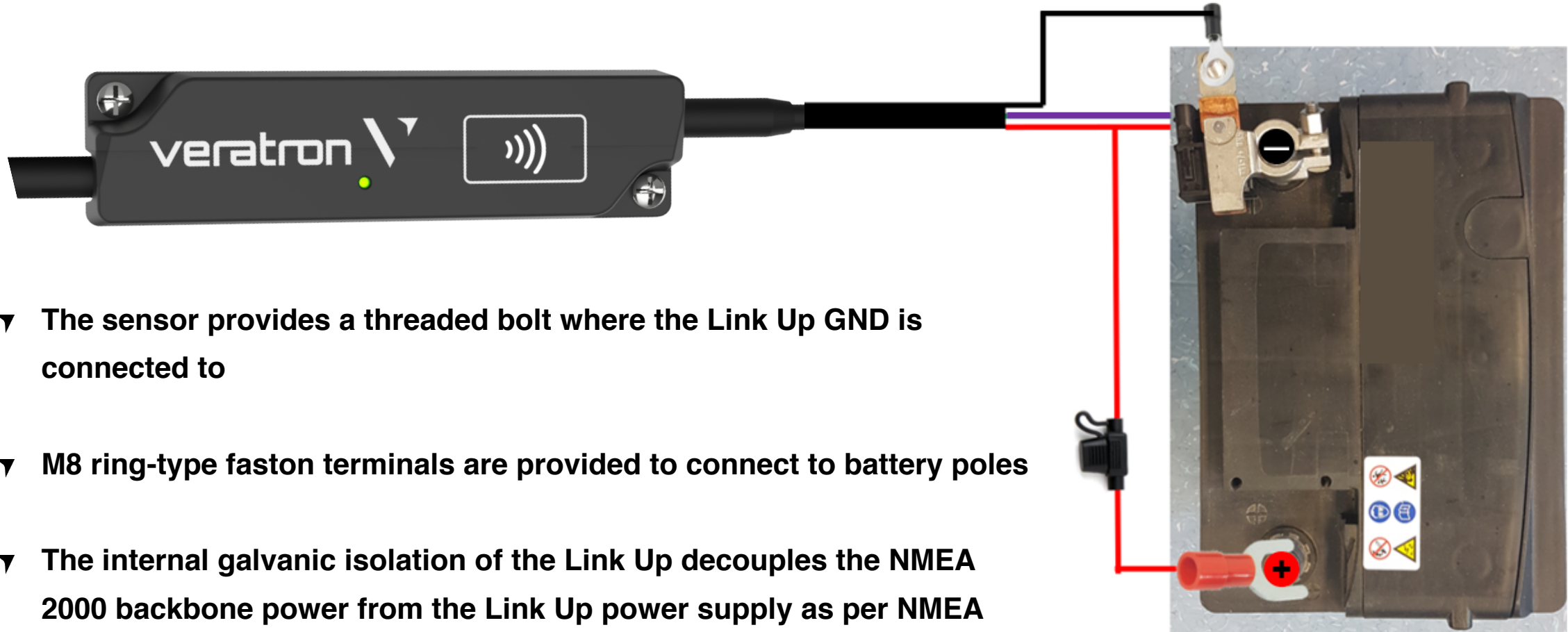
- ▼ **The sensor is directly connected to the negative pole of the battery**
- ▼ **The supply voltage is provided to both the sensor and the Link Up from the positive pole of the battery**
- ▼ **Communication between the sensor and Link Up happens through LIN bus**
- ▼ **The kit (including the Link Up) is provided with wiring harness to seamlessly install the system**
- ▼ **Watertight 3A inline fuse with housing**



IBS Hirschmann connector

Pin	Signal
1	Supply voltage
2	LIN bus

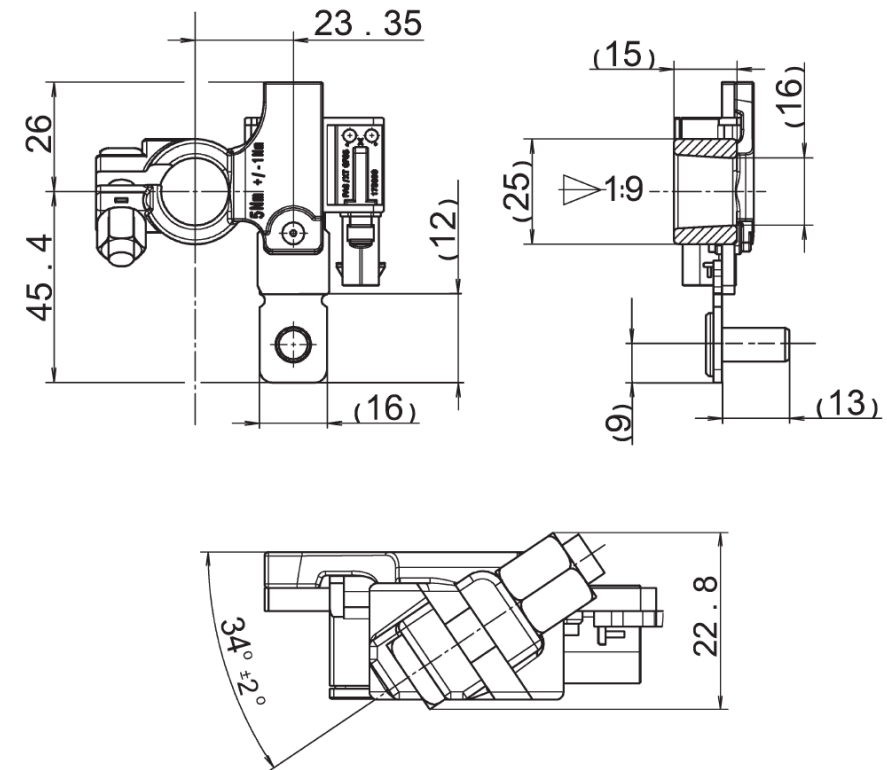
# CONNECTIONS DIAGRAM



- ▼ The sensor provides a threaded bolt where the Link Up GND is connected to
- ▼ M8 ring-type faston terminals are provided to connect to battery poles
- ▼ The internal galvanic isolation of the Link Up decouples the NMEA 2000 backbone power from the Link Up power supply as per NMEA requirement

## Datasheet

Operating voltage	6 – 16.5 V
Permanent load current	± 155 A
Maximum current	± 1500 A (500 ms)
Nominal resistance (shunt)	100 $\mu\Omega$
Operating temperature	- 40°C to 115°C
Protection class	IP 6K7
Pole terminal tightening torque	5 Nm ± 1 Nm
Threaded bolt GND connection	M8
Max battery capacity	249 Ah





**OUTDOOR INSTRUMENTATION  
ENGINEERED IN SWITZERLAND**

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