Expand fleet management systems with trailer information

Trailer solutions
Trailer Data by Squarell

Squarell created a solution for Telematics Service Providers to capture data from the trailer CAN bus. Now truck data can be extended with trailer data. Let your customers expand their control.

**Trailer Data key benefits**
- Acquire the trailer data you need
- Robust Trailer ID solution
- Compare trailer data in mixed fleets
- Brand independent solution

**Acquire the trailer data you need**
Squarell offers a hardware and software solution that provides important information from the trailer. Depending on the vehicle's degree of support, you can get the following vehicle information:
- Trailer identification
- Trailer brake information
- Trailer load information
- Trailer tyre information
Trailer Data: parameters specifications
With the right Squarell hardware, a vast amount of trailer parameters can be collected and processed into RS-232, CAN bus or Bluetooth output. Learn more about the necessary hardware on the next page. The Trailer Data solution can support multiple trailers that are coupled together.

Available parameters depending on output
- Trailer ID*
- Trailer couple status*
- Axle load sum
- EBS amber warning lamp
- EBS red warning lamp status
- VDC red applications
- Trailer weight
- Trailer cargo weight
- Trailer VIN**
- Axle location
- Axle weight
- Trailer weight
- Cargo weight
- State of the EBS amber fault
- Weight of the EBS red fault warning
- Amount of VDC active
- Amount of ABS active
- ID number of connected trailer*
- Tyre temperature
- Air leakage detection

* Squarell Trailer ID hardware add-on required
** The Trailer VIN parameter for trailer identification is added in the ISO 11992 protocol in 2014.
Necessary Squarell hardware

Squarell Vehicle Data Interface
The Squarell Vehicle Data Interface is able to collect, process and send vehicle signals to the fleet management systems. The Vehicle Data Interfaces works together with Special Function Devices such as the DatacliQ, a vehicle data reader and the Trailer ID System which are explained below.

DatacliQ: contactless vehicle data reader
The DatacliQ reads Trailer CAN data (ISO 11992 signals). With a 0-24 Volt bus system capable of obtaining the following information:
- Trailer brake information
- Trailer load information
- Trailer tyre information
- Trailer VIN*

* The Trailer VIN parameter for trailer identification is added in the ISO 11992 protocol in 2014.
Trailer ID System

The Trailer ID System transmits trailer identification to the truck’s fleet management system for identifying the couple status of the trailers in the fleet.

Trailer ID key features
- Brand independent solution for the entire fleet
- Quick installation using existing wiring
- Low power consumption (± 20 mA)
- No maintenance (no batteries necessary)

Get vital data from the trailers across the entire fleet

Support for up to 20 trailers on one road train
The Trailer ID System supports trailer configurations such as long vehicles, dolly pulls, or road train rigs. Up to 20 trailers can be identified in one road train.
The Trailer ID System: how it is connected

With the Trailer ID System, you can check if the correct trailer is connected to the truck. The system consists of two devices: one Sender (located in the trailer) for sending the trailer ID and one Transceiver (located in the tractor unit) for receiving the ID data. In combination with a fleet management system, you can get various information about the trailer. For example, the coupling and uncoupling time, the GPS location and the utilisation or cargo of the trailer.

No batteries
No maintenance
No worries
How the system sends and receives trailer data

**Trailer ID Sender**

The Sender is a tiny device installed inside the rear light cluster of the trailer. The Sender has two wires: one connected to the ground wire and one to the brake signal wire.

**Trailer ID Transceiver**

The Transceiver is a small smart device installed in the tractor unit. A sense wire is connected to the brake light wire; two wires for power supply and the Trailer ID signal output. There are three output variants: CAN bus output, SFD output for the FLEX and SFD JAE output for the SOLID.

**Quick installation**

Connecting the Trailer ID Sender to the brake light is quick and easy thanks to the pre-crimped connectors. The Transceiver unit comes with tractor specific installation instruction from Squarell to ensure correct installation. If the truck is equipped with an interface device from Squarell, a special transceiver connector can be used to plug the connector into the Special Function Device port on the Squarell device. To test signals during installation, the Trailer ID Transceiver confirms the reception of the Trailer ID signal via an LED.

**Trailer couple and uncouple messages**

When the trailer is coupled to the tractor, the ID Sender sends the trailer ID message to the Transceiver. If the trailer is uncoupled, the system knows the trailer is disconnected.
Truck and trailer support
Go to support.squarell.com to check if your vehicle supports Trailer Data and/or Trailer ID solution.

Order information
8510-190  DatacliQ for ISO11992 with SFD Connector
8511-190  DatacliQ for ISO11992 with JAE crimp
8544-10   Trailer ID Transceiver CAN (stand-alone)
8545-680  Trailer ID Transceiver SFD connector (FLEX)
8546-680  Trailer ID Transceiver JAE crimps (SOLID)
8485-037  Trailer ID