

be in control

Extend your telematics solution with the best available vehicle data. The SOLID-J is one of the most versatile devices in our range of advanced vehicle data interfaces.



# SOLID-J

- Do you like standardization?
- Do you like to add value to your telematics solution?
- Do you like to have a partner in development of FMS data?
- Do you like to have one FMS solution provider?
- Do you like additional features with tachograph data?
- Do you like easy installations?
- Do you like to provide turn key solutions to your customers?

If one of your answers is 'YES' get in contact with Squarell, your independent vehicle data and CANbus specialist.

## SOLID-J

SOLID-J is a multi-source vehicle data interface. It is part of the range of Squarell solutions for advanced vehicle data solutions. With configurable functionality and extended connectivity SOLID-J can be used in automotive applications like telematics, real-time monitoring, measurement and interfacing. The Squarell SOLID-J offers more than just streaming data. It processes the latter to provide it to you in order to accomplish advanced fleet management.

### The benefits to you

- Easy integration with telematics and modems
- Output in CANbus (FMS/J1939) or RS232 (ASCII)
- One complete solution for your entire fleet
- Does not require the FMS Gateway to be activated by the dealer
- Can be used and reused in any vehicle\*
- Analyse trip, vehicle and driver performance
- Drive better, reduce maintenance costs
- Save fuel, reduce CO<sub>2</sub>

### What is a Vehicle Data Interface

A Vehicle Data Interface is an electronics device to read data from a Vehicle Data Network and translate the data into either an RS232 (ASCII) or standardised CANbus protocol (FMS/J1939). You can read data from a brand specific vehicle network with this protective interface. With Squarell solutions you do not have to visit the truck dealer because our SOLID-J is ready to use.



## SOLID-J connects

### Vehicle data networks

SOLID-J is an advanced FMS interface with connectivity to all important vehicle data networks like: CANbus, J1939, J1708 serial and proprietary data networks.

### Modems and telematics

The powerful SOLID-J processor manages the data and processes valuable information via unique Squarell algorithms. SOLID-J has outputs for FMS/J1939 or RS232/ASCII, which makes of SOLID-J a perfect universal interface for your telematics system and modem.

## SOLID-J is safe

### CANcliQ

The Squarell CANcliQ reads the vehicle signals without making a wire to wire connection. It uses proven technology and is the safest way to read vehicle data on the market.

### NON intrusive connections

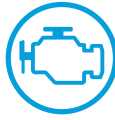
This eliminates liability matters, warranty issues or possible incorrect connections, and makes installation easy.

## Parameters



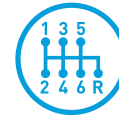
### Speed & cruise control

- Speed
- Odometer
- Cruise control active
- Over speeding
- Cruise time
- Harsh driving analysis



### Engine

- RPM
- Engine hours
- Engine coolant temperature
- Actual engine torque
- Turbo pressure
- Idle analysis



### Clutch & gear

- Clutch switch
- Clutch applications
- Over revving
- Kickdown switch



### Brake analysis

- Brake switch
- Brake applications
- Harsh brake indicators



### Fuel analysis

- Total fuel used
- Fuel level
- Actual fuel consumption
- Fuel used during idle



### Others

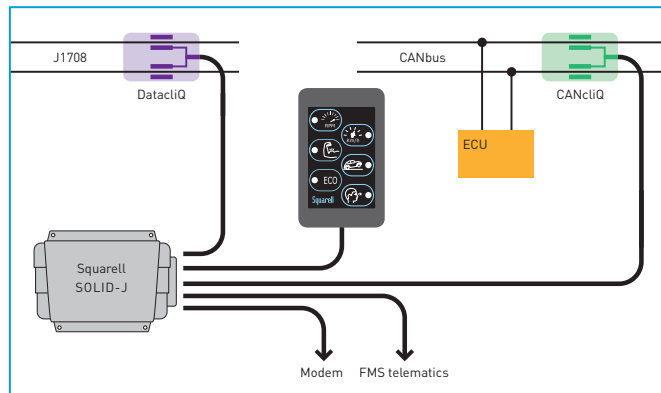
- Service distance
- Axle weight
- Vehicle ID
- Driving time
- PTO

### Important:

Not all parameters from the list may be available. This availability of the data depends on the brand, model, year and configuration of the vehicle.

## Connection

The SOLID-J sends data by either an FMS/J1939 CANbus or RS232 output. This data contains the FMS standard parameters, J1939 parameters and also Squarell calculated parameters that can help you analyse and increase the vehicle performance, reduce CO<sub>2</sub> emissions and save fuel.



## Comparison SOLID versions

SOLID	SOLID-J	SOLID-K
FMS interface with CAN input	FMS interface with CAN input	FMS interface with CAN input
	J1708 input	K-line input
CAN output (FMS/J1939)	CAN output (FMS/J1939)	CAN output (FMS/J1939)
Optional RS232 output (ASCII) (male or female)	Optional RS232 output (ASCII) (male or female)	Optional RS232 output (ASCII) (male or female)
3x Special Function Device ports	3x Special Function Device ports	3x Special Function Device ports

## Technical information

<b>Dimensions/Weight</b>	Length 89 mm, Width 63 mm, Height 27 mm/170 grams	<b>2x CANbus</b>	1 x Read only and 1 x read/write, 10-1000 kbit/sec, auto baud, J1939, Layer2
<b>Operating temperature</b>	-40°C to 85°C	<b>1x J1708</b>	J1922/J1587 support
<b>Power consumption Active</b>	Running, no external load, 30mA at 24V supply CAN/RS232 drivers on, 110 mA at 24V supply	<b>1x RS232 (female)</b>	3 wire RS232, max 230kbaud, proprietary ASCII/Binary protocols HDLC/PPP, CCITT16, non-printable Escaping
<b>Voltage range</b>	10-30V	<b>3x Special Function Device Port</b>	2 ports to connect DatacliQ, DAP, trailer Data system and other SFD devices
<b>LED</b>	Three colour status indication LEDs		
<b>Connectors</b>	1x 36-pole connector		

## Order information

There are two complete kits available

### SOLID-J CANcliQ kit (8836-02Q1)

8036-02 SOLID-J  
8636-Q1 SOLID CANcliQ cable (Power, CAN1, CANcliQ)

### SOLID-J Universal kit (8836-02W1)

8036-02 SOLID-J  
8636-W1 SOLID Universal cable (Power, CAN1, CAN2)

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