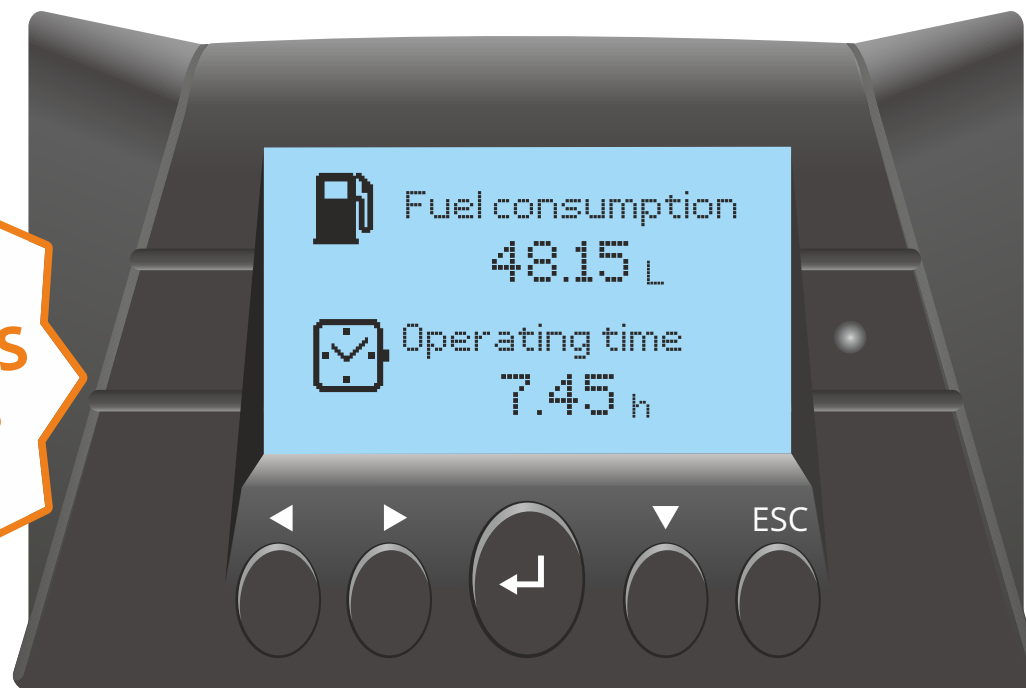




TECHNOTON

CAN bus display

10 000+
CAN & ISOBUS
parameters



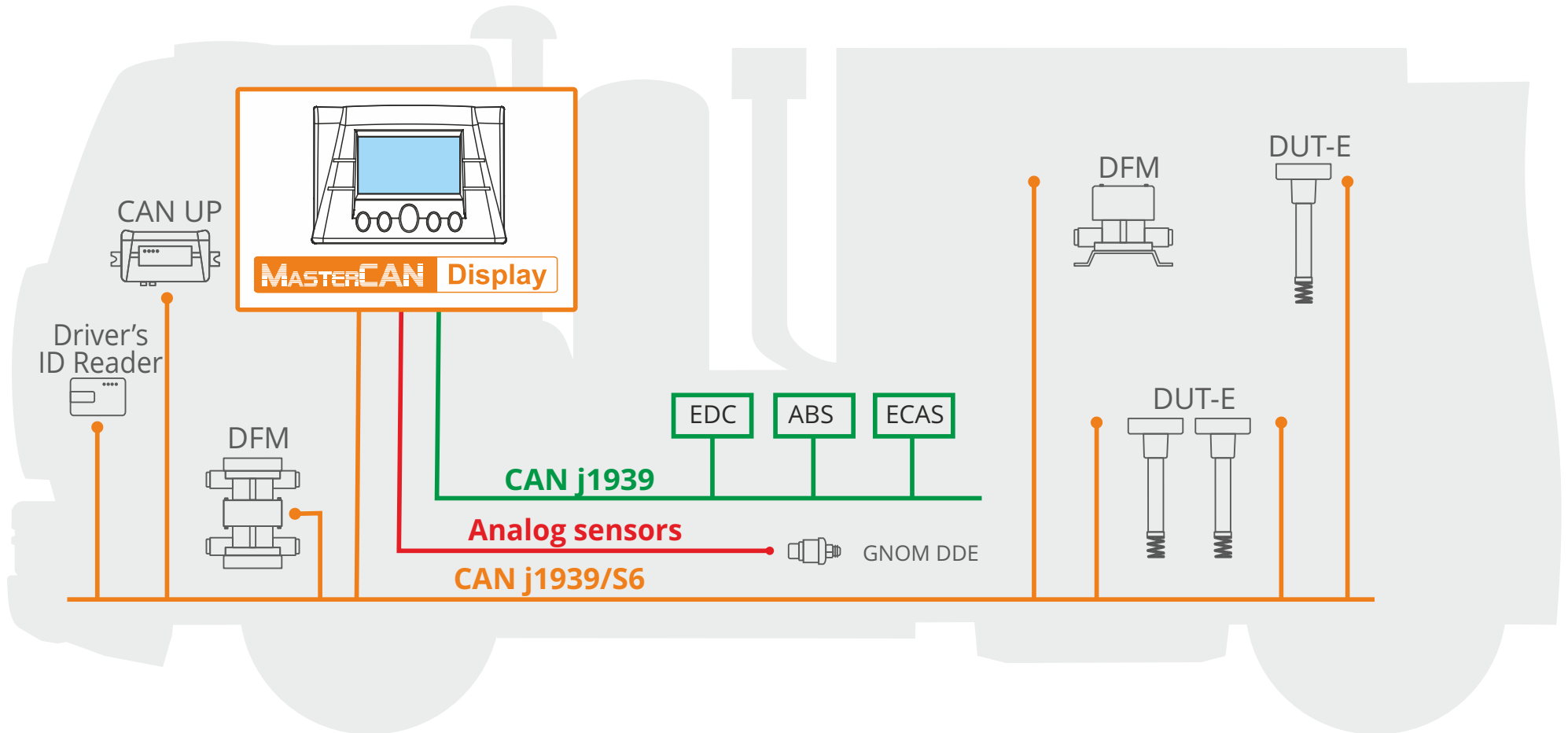
MASTERCAN Display 35

Purpose

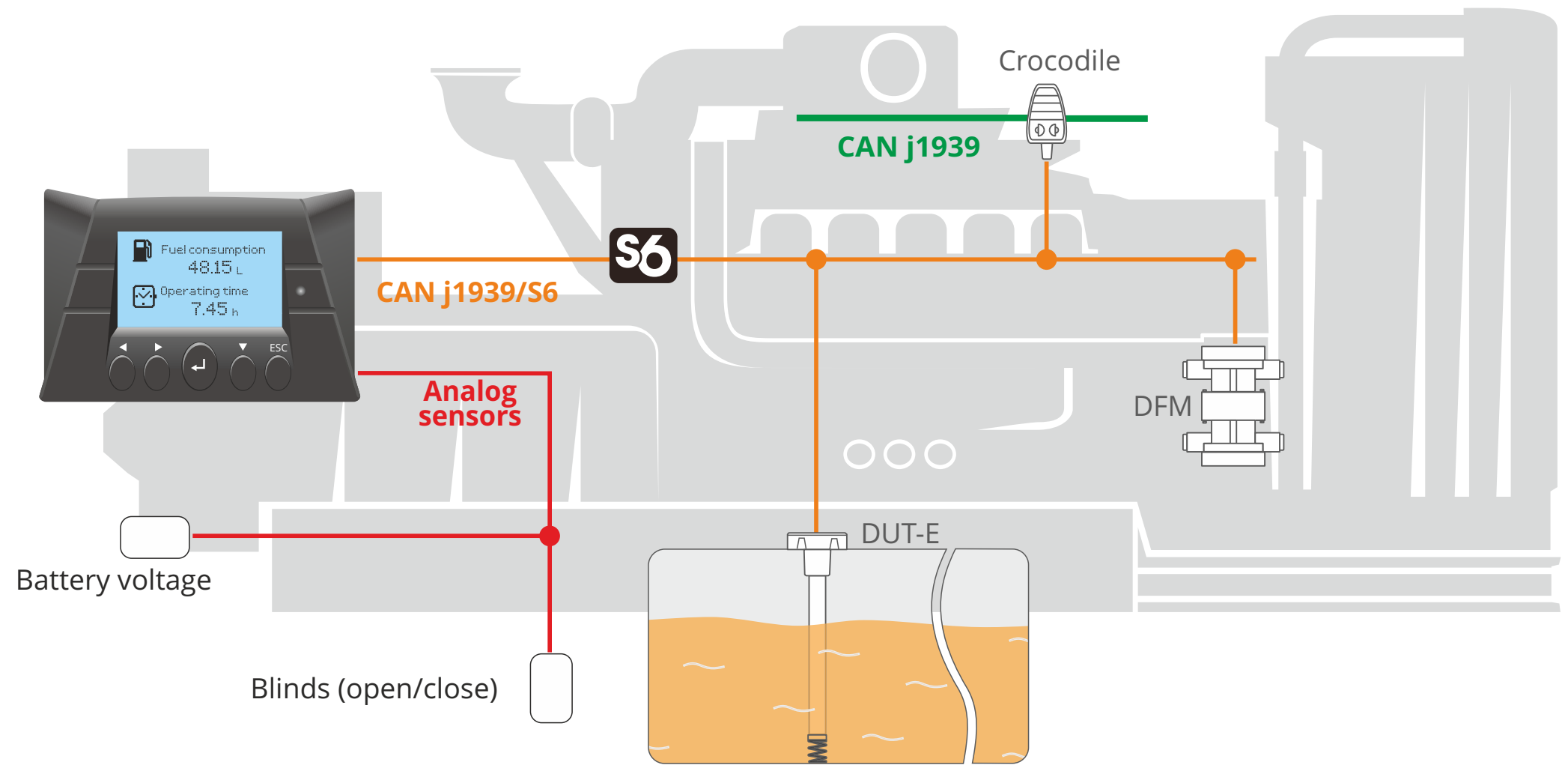


CAN bus display / HMI device designed for displaying CAN J1939 and ISOBUS parameters and data from additional fuel level sensors, fuel flow meters, axle load sensors and other peripheral units used in vehicle telematics systems or stationary machinery monitoring system.

Application/ Vehicle telematics



Application/ Stationary machinery monitoring



Features/ Automatic parsing CAN and ISOBUS messages



In-built database of SPNs, which can be shown by CAN bus display, includes over 10,000 operation parameters of machinery described and standardized by CAN J1939 and ISOBUS specifications.

Display automatically scans the CAN bus and detects available parameter groups (PGNs).

Features/ Displaying data from additional sensors



Axle load
3380kg



Fuel consumption
48.15 l/h



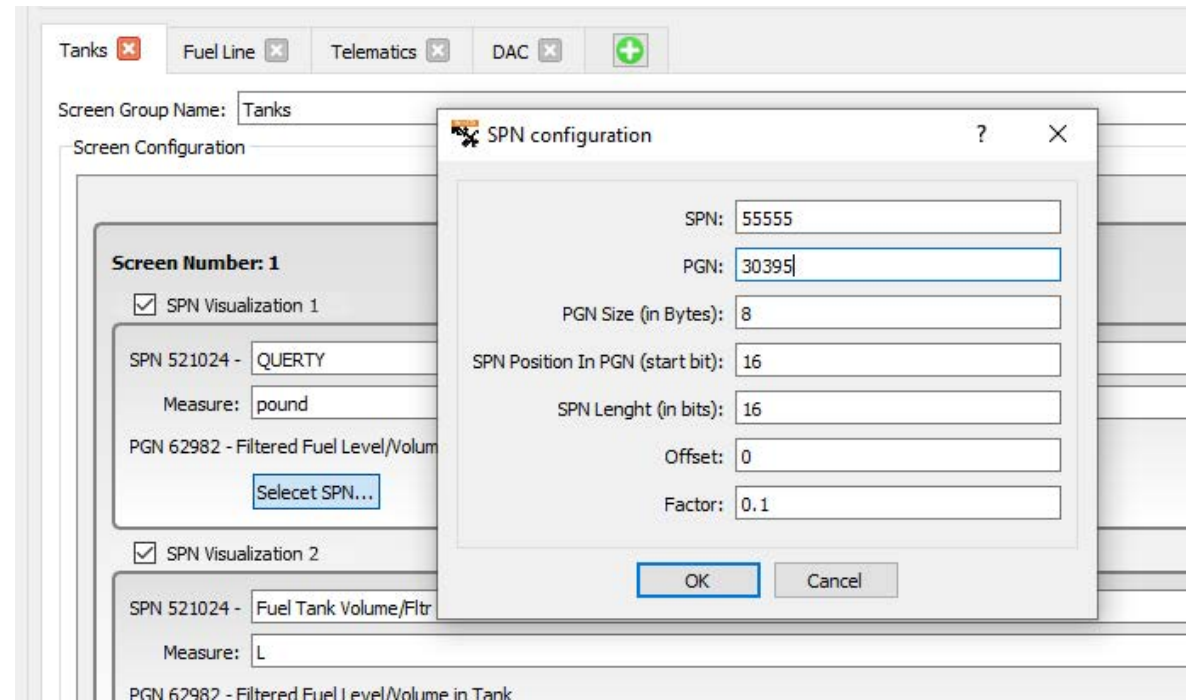
Operation time
7.45h



Fuel volume
344.55 l

Display shows data from additional fuel level sensors, fuel flow meters, axle load sensors and other devices used in the monitoring system.

Features/ Proprietary CAN messages display



Display selects and displays proprietary messages CAN J1939/71 protocol from third party devices with CAN interface.
For U and M models.

Features/ Analog signals converting to CAN

Channel 1 / Analog input (0.5-10 V) / UinA / A4

Output data

PGN: 65258 - Vehide Weight

SPN: 582 - Axle Weight

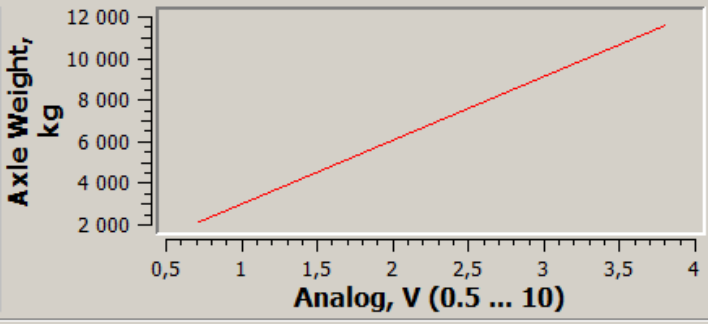
S6 Address (SA): 109 PGN Sending Period, ms: 1000

Filtration degree: Middle Battery Voltage Dependence: Off

Channel Calibration Table

	Analog, V (0.5 ... 10)	Axle Weight, kg (0 ... 32127)
1	0.72	2100
2	3.80	11500
3		
4		

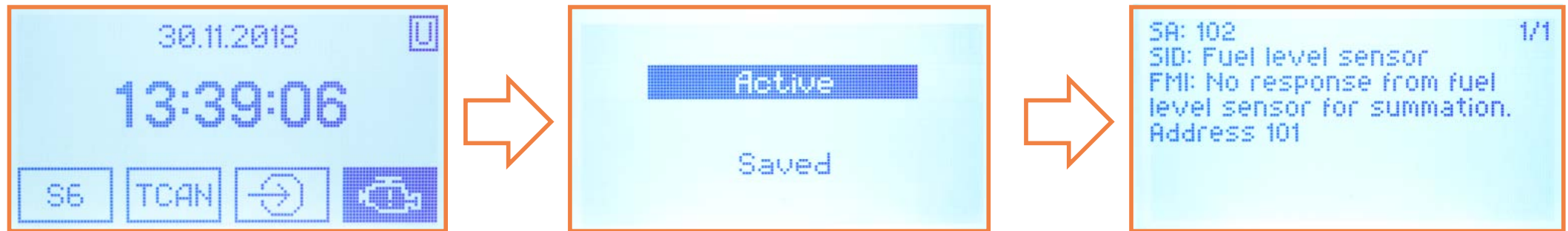
Add Delete Clear



Analog signals of the input channels are converted to CAN messages.

Calibration table of the channel is saved in the display memory (for example, for an axle load sensor). Maximum number of points in the table is 10.

Features/ Malfunctions registration and decryption (DTC)



For each active/saved malfunction (DTC) the following data are displayed on the separate information screen:

- network address of Unit (SA);
- malfunction code (SID);
- malfunction name (FMI).

Features/ Events monitoring

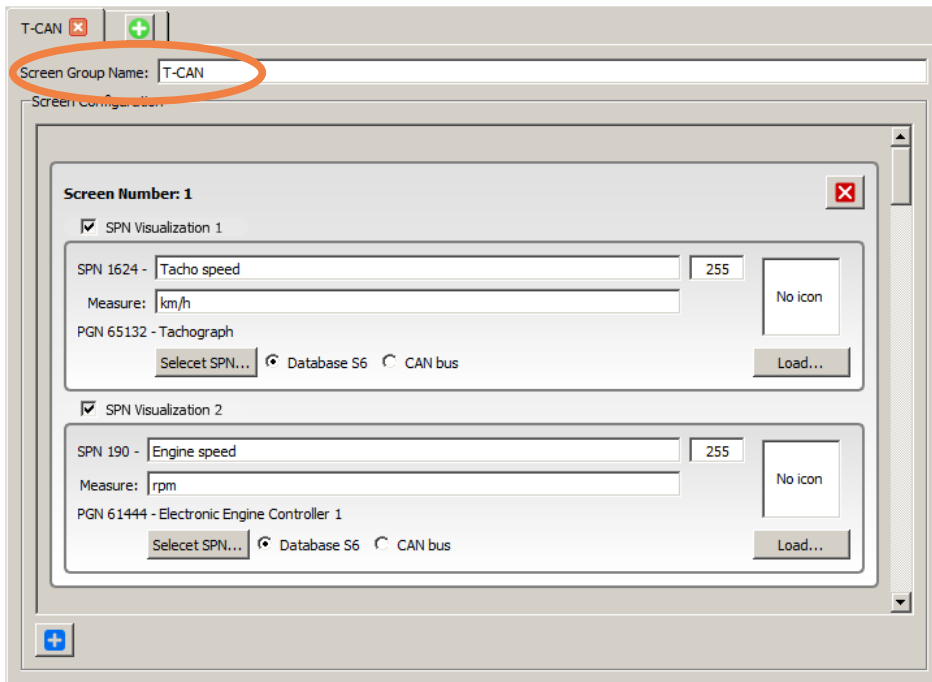


Events from external Units using S6 Technology may be displayed in group of screens:

Event Type	Example	Number
Emergency	Pressing the emergency button	up to 20
Important	Onboard circuit failure	up to 20
Information	Power ON/OFF	up to 20

Settings/ Configuring informational screens

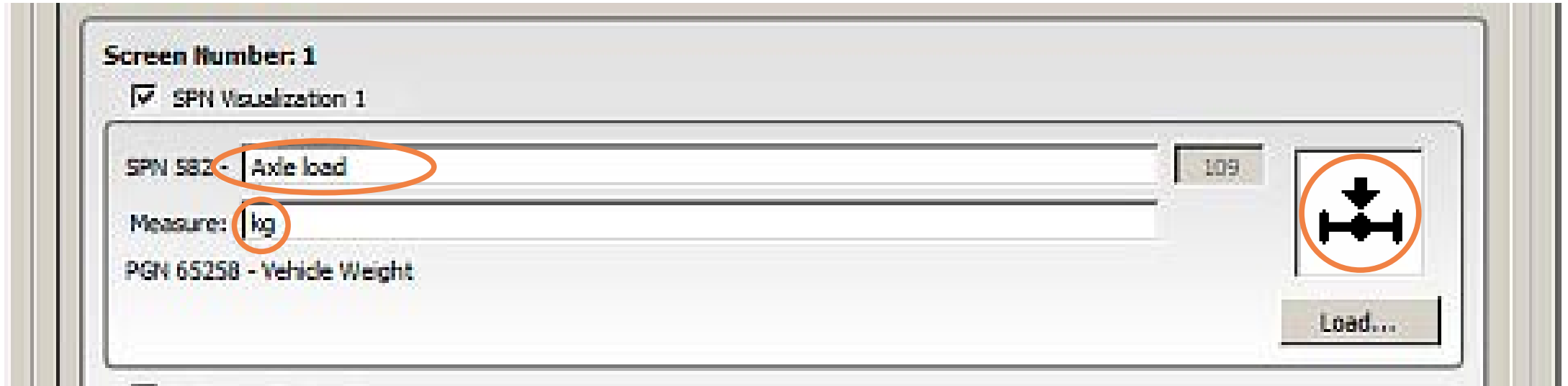
It allows to create up to 201 screens. Each screen can contain 1 or 2 parameters. Screens can be combined into groups (up to 20 groups).



The default groups are:

- **Tanks** (data on the fuel in the tanks obtained from the fuel level sensors).
- **Fuel Line** (data on fuel consumption and operating time obtained from flow meters).
- **Telematics** (engine operation data received from J1939 i/o modules).
- **DAC** (data from analog sensors of the vehicle, converted by a digital-to-analog converter).
- **T-CAN** (data on the operation of units and assemblies obtained directly from the CAN buses).
- **Inputs** (data from analog sensors converted by the Display itself).

Settings/ Data editing



When configuring the Display, you can edit:

- Parameter name;
- unit of measurement;
- Parameter icon (pictogram).

Settings/ Search for CAN or ISOBUS messages

Select SPN/PGN

Type to filter by SPN: Enter search text SPN

SPN	SPN Name/Specifier	Measure	PGN	SA	Counter
521023	Fuel Tank Level/Filtering	mm	62982	101	88
521024	Fuel Tank Volume/Filtering	L	62982	101	88
521025	Tank Fuel Rate	L/h	62982	101	88
174	Engine Fuel Temperature 1	°C	62982	101	88
158	Keyswitch Battery Potential	V	62987	101	88
521049	Ignition Key State	-	62987	101	88
521053	Ignition ON Time	s	62987	101	88
521126	Distance by GNSS	m	62996	101	88
521127	Movement Time by GNSS	s	62996	101	88
959	Seconds	s	62997	101	88
960	Minutes	min	62997	101	88
961	Hours	hr	62997	101	88
963	Month	month	62997	101	88
962	Day	day	62997	101	88
964	Year	year	62997	101	88
1601	Local minute offset	min	62997	101	88
1602	Local hour offset	hr	62997	101	88
521155	UTC Time by GNSS	s	62998	101	88
584	Latitude	deg	62998	101	88
585	Longitude	deg	62998	101	88
521090	Horizontal Dilution Of Precision (HDOP)	-	62998	101	88
165	Compass Bearing	deg	62998	101	88
580	Altitude	m	62998	101	88
517	Navigation-Based Vehicle Speed	km/h	62998	101	88
517	Navigation-Based Vehicle Speed/Mean	km/h	62998	101	88
521134	GNSS Reciver Status	-	62998	101	88
521135	GNSS Antenna Status	-	62998	101	88

SPN 521023 - Fuel Tank Level/Filtering (PGN 62982)

Clear Save OK Cancel

From the current CAN bus data, any operation parameters can be selected.

Displayed: hourly fuel consumption, tachograph speed, total mileage, mileage for the trip, RPM, operating time, current engine torque, oil pressure, coolant temperature and others.

Technical specifications



Digital interface	CAN j1939/S6
Power supply voltage range	9 ... 45 V
Voltage input	0.5 ... 10 V
Frequency input	0.01 ... 10 kHz
Temperature range	-10...+60 °C
Ingress protection rating	IP 40
Display	LCD 128x64

Equipment integration

MasterCAN Display 35 can be **simultaneously** connected to:



16 fuel level sensors,



2 axle load sensors,



16 fuel flow meters,



42 analog sensors
via converter,



vehicle **CAN bus**

Models

G

Truck. Level sensor in tank, fuel consumption, engine operating time via CAN, speed, operating time, axle load. 21 pre-set screens.

T

Tractor. Fuel level in tank, fuel Consumption, engine operating by CAN bus, machine hours. Preset screens (27 screens, two parameters on screen).

U

Universal. Model with extended user rights for configuring screens. Displaying any of 10500+ CAN or ISOBUS operation parameters. Flexible adjustment of number of screens (21 groups, 10 screens in each). Configuration displayed parameters (1 or 2 on one screen, change parameter names and icons). Display of parameters not included in CAN and ISOBUS.

M

Vessel. Control of fuel in the tank, generator's and boiler's engine fuel consumption. Functionality is the same as the **U** model. Preset screens (37 screens, two parameters on screen).

Installation example/ Diesel locomotive (Chile)



The locomotive is equipped with:

- two DFM Marine fuel flow meters in the fuel system;
- two DUT-E fuel level sensors in fuel tanks;
- CANUp telematics gateway and MasterCAN Display 35 in the driver's cab.

The display shows data on fuel consumption, engine operating time, remaining fuel in the tanks.

Installation example/ Sea ferry (Croatia)



The ship is equipped with:

- DFM Industrial fuel flow meter in the fuel system;
- CANUp telematics gateway and MasterCAN Display 35 in the wheelhouse.

The display shows data on fuel consumption, engine operating time.

Summary

MasterCAN Display 35 works “out-of-the-box” without any additional programming, interface development, manual calculation of HEX values.

During CAN bus j1939 scanning, MasterCAN Display 35 detects all available parameter groups (PGN) and parameters (SPN). The display recognizes more than 10,000 parameters of equipment operation.

The display allows displaying proprietary CAN J1939/71 protocol messages from third party devices with CAN interface.

Specialized models "Truck", "Tractor" and "Vessel" have pre-configured screens to save user time.

MasterCAN Display 35 can be simultaneously connected to: **16** fuel level sensors, **16** fuel flow sensors, **2** analog sensors.

Learn more

Official web-pages



www.jv-technoton.com

More about S6 Technology



rd-technoton.com

More about IoT Burger Technology



rd-technoton.com

Document center



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