



GPS 100



# GPS 100.VIEW

TECHNICAL SPECIFICATION

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In modern vehicles with more and more driving assistance functions and electronic systems, test engineers have to perform increasingly complex, elaborate and precise tests.

The gps100.VIEW combines the hugely successful VarioView 7 with the outstanding GPS performance of the gps100 series. The result is a device that could not be more versatile, supporting the engineer during testing, evaluating measured values and recording them internally or externally. Whether brake performance tests, acceptance runs, tire development or simply as an intelligent display - all this is possible with the gps100.VIEW thanks to its high functional density and sunlight-readable touch screen. Via various applications, the system can measure and analyse driving performance, braking power or traction for example. Further software modules are in preparation. In addition, several display pages can be configured completely individually.

In addition to the already outstanding functional density, a script engine is in preparation which, by means of the programming language "Basic", gives the engineer a simple to use possibility to create own routines and functions as well as complex displays independently. All settings are imported in via an external memory. This makes it easy to choose between different setups and reconfigure the system for a different measurement task in seconds.

The gps100VIEW has been developed for all-round use, where using a built-in microphone it is possible to record speech in sync to the measured data. A loudspeaker provides acoustic information. Gigabit ethernet and 3xUSB hosts round off the package. Thanks to CAN FD up to 8MBaud, the system is prepared for future vehicle generations. Of course, a parallel connection to OBD-II is also possible. Triggers can be activated via the digital inputs and accompanying variables such as pedal travel or voltages which may be measured via the analog input. Via various output functions (e.g. CAN bus or analogue) most of the measured values can be fed into external, further processing systems.

**Applications:**

- Driving performance measurement
- Brake tests
- Homologation
- Driving dynamics & handling
- Consumption & exhaust gas measurement
- Development of driving assistance
- Intelligent CAN display
- Data recording
- Test and measurement runs

## GENERAL

### GPS system

up to 400Hz (IMU)  
up to 100Hz (GPS only)

### Slave GPS

up to 20Hz  
GPS L1  
Glonass/Galileo/BeiDou

### CPU/MCU

High-Performance  
nVIDIA Tegra 3  
up to 1.4GHz with active power management

### Display / Buttons

Touchscreen, 7" 800x480 Pixels,  
16Bit colors with brightness sensor

5 Buttons

### Housing

Anodised aluminum housing with mounting holes

### Size and Weight

approx.  
207x118x44mm  
weight approx. 800g

### Supply

9V to 32V, DC  
max. 600 mA  
(Peak 1.5A) @ 12V

### Temperature

Operating  
-20 to 70°C

Storage  
-20 to 70°C

## INPUT

### CAN

up to 4 channels\*  
CAN 2.0 A/B, up to 1MBaud, adjustable  
Supports CAN FD up to 8MBaud

Terminating resistor can be switched on in the software

Input of CAN signals via DBC into the data pool

### OBD-II\*

configurable according to ISO15765

Various signals can be interrogated by the vehicle

\*Vehicle dependent, option

### Digital

2 digital trigger inputs  
>5V High level  
<1V low level  
latency <1uS

### Analog

3 analog inputs  
0-60V DC, 12Bit resolution  
100Hz sampling rate  
-3dB@ 55 Hz

## OUTPUT

### CAN

up to 4 channels\*  
CAN 2.0 classic, up to 1MBaud, adjustable, standard 11bit IDs  
Terminating resistor connectable  
Supports CAN FD up to 8MBaud

## OTHER

### Interfaces

2x USB 2.0 Host - Type A\*  
1x Ethernet on RJ45, 100m Baud  
\*Single USB 2.0 Host for Dual GPS

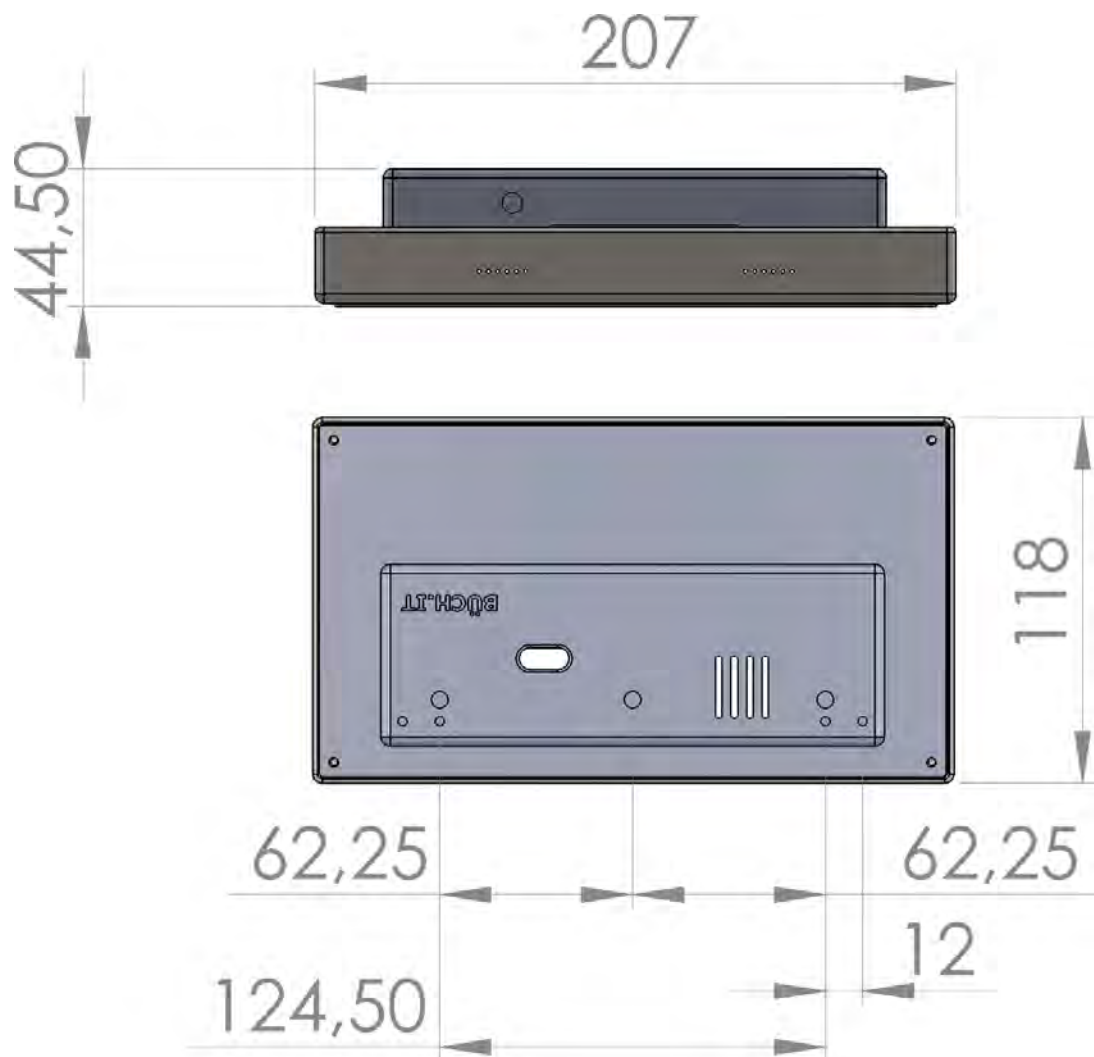
### Warranty

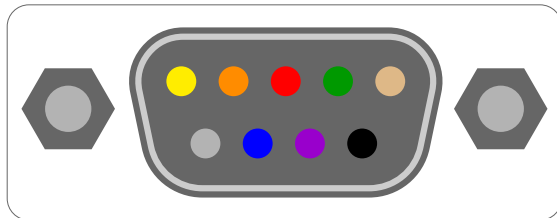
1 year limited warranty

**GPS Performance / Accuracies**

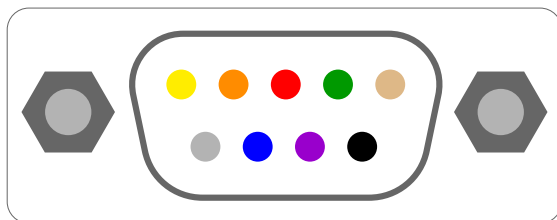
<b>Speed</b>	Accuracy: 0.108 km/h Resolution: up to 0.0036 km/h* Latency: 0ms (with time stamp) max. 515 m/sec  Refresh rate: 100Hz
<b>Position accuracy</b>	GPS L1 - 1.5m GPS L1/L2* - 1.2m GPS L1/L2*/SBAS - 0.6m GPS L1/L2*/RTCM* - < 4cm  Refresh rate: 100Hz
<b>Heading</b>	Resolution: 0.01° Accuracy: 1° / Dynamic

\*optional

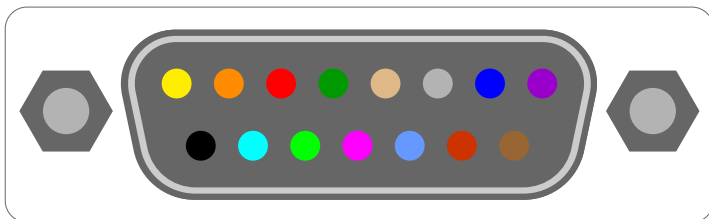


**OBD-II / Power # D-Sub 9pol # Female**


1	●	CAN-L
2	●	-
3	●	CAN-H
4	●	GND
5	●	GND
6	●	VCC
7	●	-
8	●	-
9	●	-

**OBD-II / Power # D-Sub 9pol # Male**


1	●	-
2	●	CAN1-L
3	●	GND
4	●	CAN2-L
5	●	-
6	●	-
7	●	CAN1-H
8	●	CAN2-H
9	●	-

**AUX # D-Sub 15pin # Female**


1	●	DGND
2	●	Digital In 1
3	●	Digital In 2
4	●	DGND
5	●	DGND
6	●	Analog In 2
7	●	Analog In 1
8	●	remote*
9	●	CAN3-L
10	●	CAN3-H
11	●	CAN4-L
12	●	CAN4-H
13	●	-
14	●	Analog In 3
15	●	AGND

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