



GPS 100



GPS 100.VIEW

TECHNICAL SPECIFICATION

WWW.BUECH-IT.DE



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
- Driver assistance system development
- 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

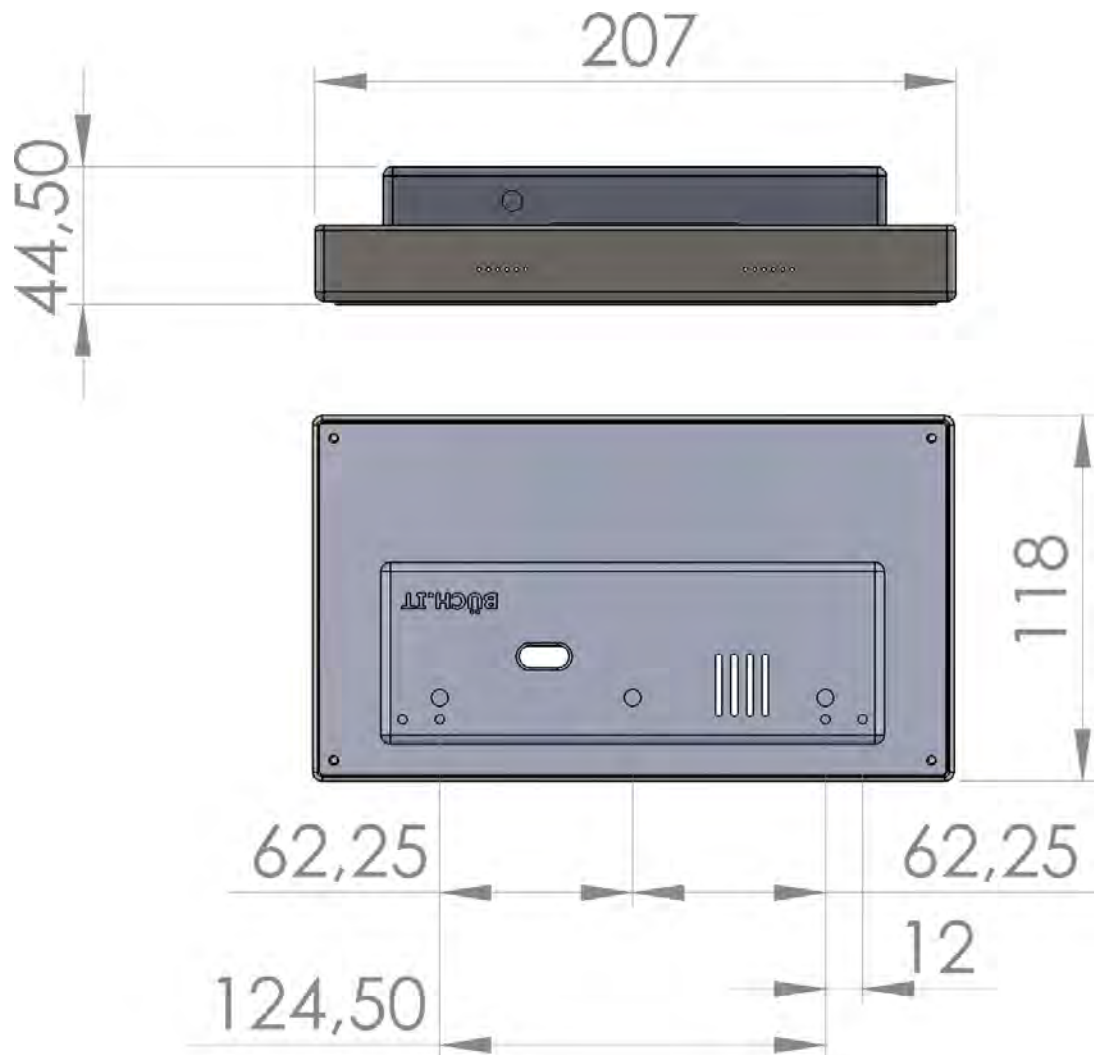
Warranty

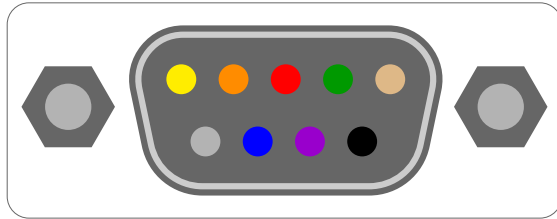
1 year limited warranty

GPS Performance / Accuracies

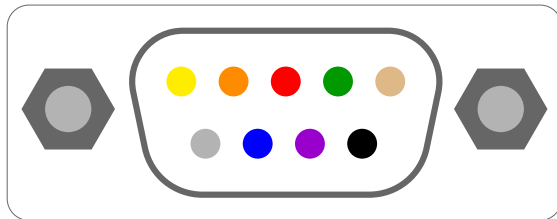
Speed	Accuracy: 0.108 km/h Resolution: up to 0.0036 km/h* Latency: 0ms (with time stamp) max. 515 m/sec Refresh rate: 100Hz
Position accuracy	GPS L1 - 1.5m GPS L1/L2* - 1.2m GPS L1/L2*/SBAS - 0.6m GPS L1/L2*/RTCM* - < 4cm Refresh rate: 100Hz
Heading	Resolution: 0.01° Accuracy: 1° / Dynamic

*optional

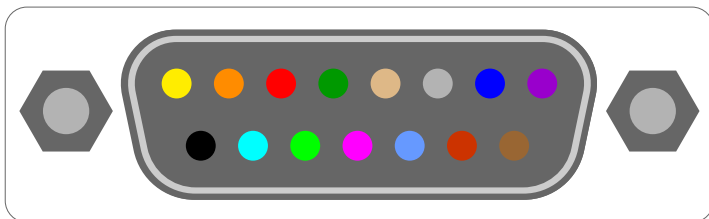


OBD-II / Power # D-Sub 9pol # Female


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

Büch.IT

Steinenbrück 18
57642 Alpenrod
Germany

<https://www.buech-it.de>
info@buech-it.de

+49-2662-500477-0