

xproGPS_max2

a super-charged 100 Hz GPS / CAN Logger

100Hz GPS, RTK, 4 x CAN, Analog-In, Counter – perfect for Performance Test + Datalogging

The renewed generation xproGPS_max2 contains a 100 Hz GPS receiver with extended functions that were previously not available or only available at high costs.

The RTK capability offers a location accuracy of approx. 1cm. The dual-antenna version provides precise heading and pitch angle Information.

Several automotive specific interfaces such as 4 independent CAN buses or various digital and analog I/Os allow convenient access to a variety of external data sources.

xproGPS_max2 is therefore ideally suited as a compact and reliable test system for all kinds of automotive applications.

New Receiver Unit now with RTK

xproGPS_max2 contains a GPS receiver unit of the latest generation with a native data rate of 100 Hz in best signal quality and revised suppression of external interference such as trees, buildings, etc.

xproGPS_max2 is RTK-capable and achieves a position accuracy of approx. 1 cm with RTK activated!

Short-term drop-outs in the GPS signal are largely compensated By the internal inertial sensor in the system.

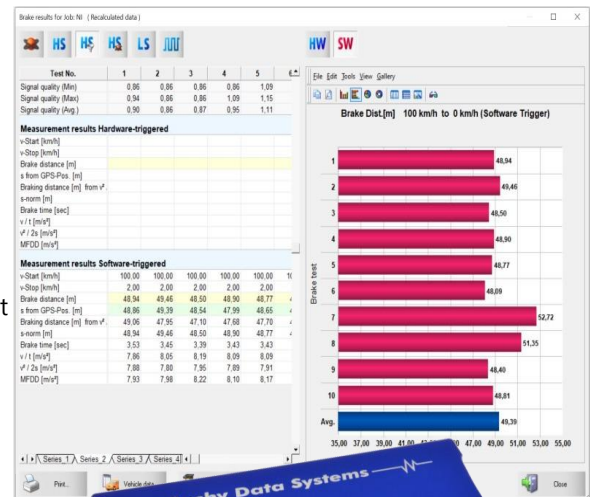
An additional assist receiver with 25 Hz forms a back-up for extremely critical reception situations.

Multi-use CAN/GPS Logger

Several I/O channels and various communication Interfaces make xproGPS_max2 a powerful engineering Tool.

- 4 independent CAN buses (CAN-FD already prepared)
- USB 2.0 interface for real-time data transfer to PC
- Interface for a driver display
- 4 analog inputs with 24 bit and +/- 20V range(optional)
- 4 high-speed counter inputs
- Trigger input (rising and falling edge)
- Analog output 16-bit resolution
- Programmable frequency output
- Binary inputs, programmable switching contact, 1PPS

Last but not least – a 6D Inertial sensor and a precise altimeter are already included as additional sensors.



Software Power for your applications

xproGPS_max2 comes with a comprehensive software tool.

The Windows software contains a fully equipped tool for driving performance tests.

- Acceleration from a standstill, flexibility, coasting
- Special brake test package (hybrid with external IMU)
- Wheel slip and aquaplaning

External expansion units, such as xproThermo8, xproAnalog8 or the external IMU xproINS_IP68, can be recorded via CAN bus using the data logger module.

The system can be operated in stand-alone mode with a driver display or "online" with real-time graphics on a laptop.

Technical Data

Communication Interface	
CAN Bus Specification	Serial COM port
4 x CAN 2.0B @ 500 kBit/s or 1 MBit/s	COM port RxD / TxD Interface for Driver Display
CAN-FD ready Interface	COM Specification 115 kBd, 8 bit, Software Handshake
CAN Interface with separate galvanic isolation/power	USB Port
CAN sockets: 1 standard Dsub9, 3 Lemo sockets	USB supporting a speed of 12 Mbit/s
Logging up to 100 ch @ 100Hz on each bus	
Adding multiple SUCHY modules such as xProThermo8	
Dual GPS Unit	
100 Hz Main Receiver	25 Hz Assist Receiver
Native Data Rate 100 Hz	Native Data Rate 25 Hz
Satellite GPS, GLONASS, Beidou, Galileo, SBAS, EGNOS	Satellite GPS, GLONASS, Beidou, Galileo, SBAS, EGNOS
L1 / L2 / L5 Band tuner	Sensitivity – 167dBm
Event Marker with additional NMEA message	Cold start 24 s, Hot Start 2 s
RTK positioning precision appx. 1cm, 1.2m Standalone	Horizontal Position Accuracy 2.0 m CEP
Optional Dual Antenna version with Heading + tilt angle	
Internal Sensors	
Measurement range Add-on IMU	
Accelerometer 2g/ 4g/ 8g/ 16g (default: 2g)	Gyroscope 125 / 250 / 1,000 / 2,000 deg/sec
Resolution 16bit	Output Noise 0.07 dps RMS
Output Noise 1.5 mg RMS	Cross Axis Sensitivity 0.2 % FSR
Cross Axis Sensitivity 1 % FSR	
Measurement range barometric Altimeter	
Pressure range 50 ~ 1,200 kPa	
Absolute accuracy +/- 0.5 hpa	
Specifications additional I/Os	
4 analog-input 24 bit, +/- 20V range (piggy pack)	SD- card socket: Card size up to 32 GB
4 count inputs fmax 4 MHz i.e. for wheel speed, Fuel	Precision Real-Time Clock
2 digital input 3.0 ~ 32 V	
Trigger input falling and rising edge -> i.e. Brake pedal	
Programmable PLL Frequency out	
Programmable Switch contact 50 V/ 0.5 A	
All/ I/Os with Galvanic isolation	
Power and Dimensions	
Power Supply	Dimensions and Weight
Wide range power supply 10 ~ 32VDC	175 x 123 x 25 mm
Galvanic isolation	Approx. 350 g
Reverse Polarity and EMC protected	Solid alloy housing / Quality Lemoso Sockets
Battery free Back-up buffer	Temp. range: - 40 ~ 85 °C

