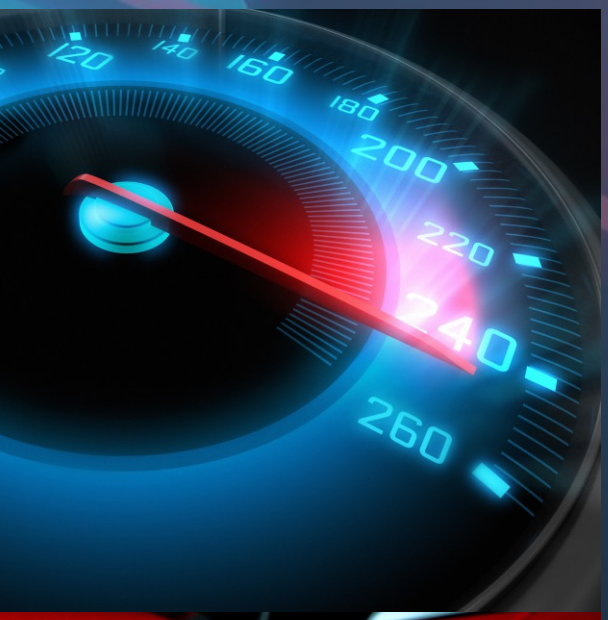
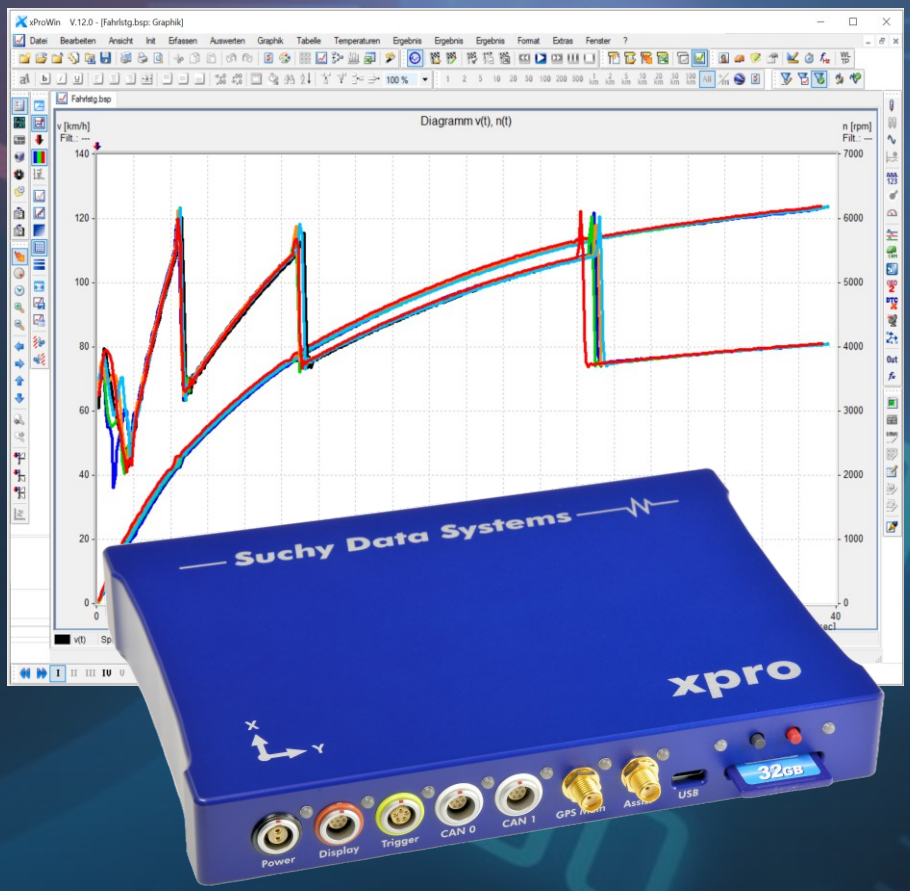
Suchy Data Systems

xproGPS_max2

a super-charged 100 Hz GPS / CAN Logger





Top GPS, 4 CAN, 4 Counters, 4 Analog-In, Altimeter, Inertial Sensor

clever Testing with xpro©

xproGPS_max2

turbo-charged 100 Hz GPS Logger

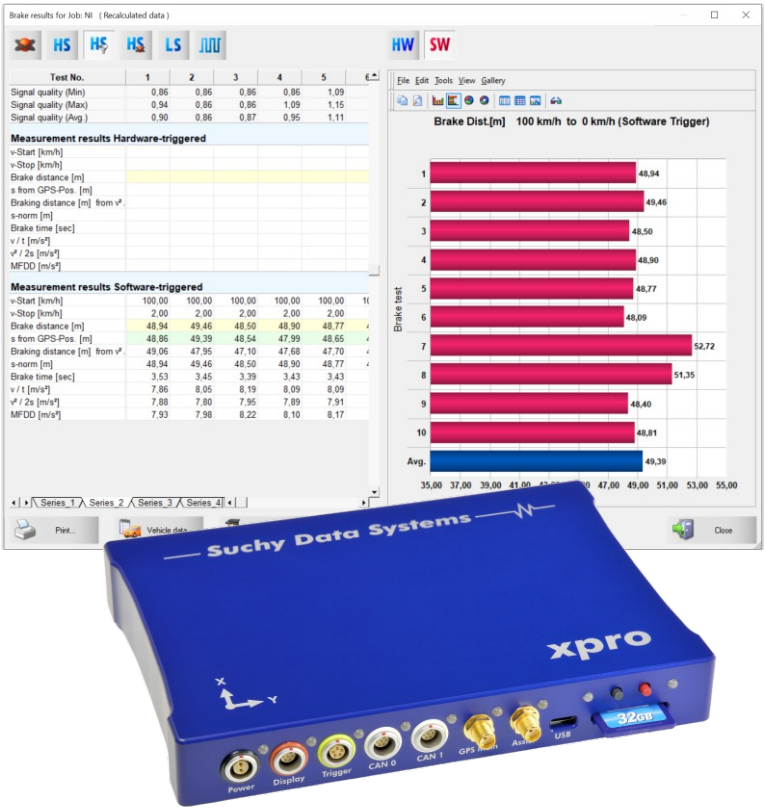
100Hz GPS, RTK, 4*CAN, Analog-In, Counter - perfect for Performance Test + Datalogging

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. 1 cm. 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

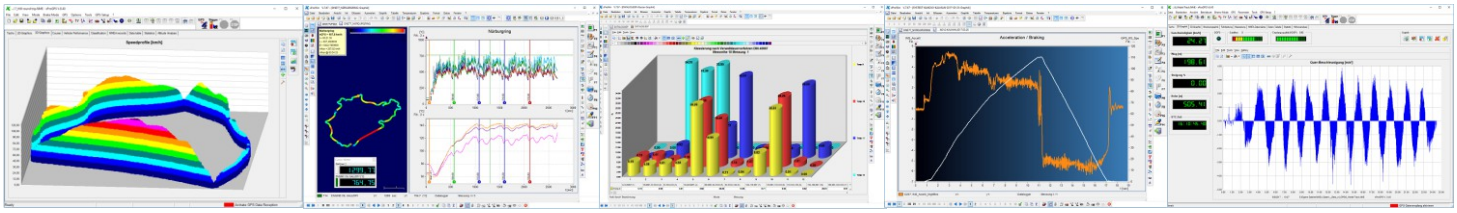
xproGPS_max2 comes with a comprehensive software tool.

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.



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xpro©GPS_max2

a turbo-charged 100 Hz GPS Logger

100Hz GPS, RTK, 4*CAN, Analog-In, Counter - perfekt für Fahrleistung und Datalogging

Technical Data

Communication Interfaces

CAN Bus Specification

- 4 * CAN 2.0B @ 500 kBit/s or 1 MBit/s
- CAN-FD ready Interface
- CAN Interface with separate galvanic Isolation / Power
- CAN sockets : 1 Standard DSUB9, 3 on Lemo sockets
- Logging up to 100 channels @ 100 Hz on each bus
- adding multiple SUCHY modules such as xProThermo8

Serial COM Port

- COM port RxD / TxD Interface for Driver Display
- COM Specification 115 kBd, 8 bit, Software Handshake

USB Port

- USB supporting a speed of 12 Mbit/s

Dual GPS Unit

100 Hz Main Receiver

- native Data Rate 100 Hz
- Satellites GPS, GLONASS, Beidou, Galileo, SBAS, EGNOS
- L1 / L2 / L5 Band tuner
- Event Marker with additional NMEA message
- RTK positioning precision appx. 1cm, 1.2 m Standalone
- optional Dual Antenna version with Heading + Tilt angle

25 Hz Assist Receiver

- native Data Rate 25 Hz
- Satellites GPS, GLONASS, Beidou, Galileo, SBAS, EGNOS
- Sensitivity -167 dbm
- Cold Start 24 s, Hot Start 2 s
- Horizontal Position Accuracy 2.0 m CEP

Specification additional I/Os

- 4 Analog-Inputs 24 Bit / +/-20V range (Piggy Pack)
- 4 Counter Inputs fmax 4 Mhz i.e. for Wheel Speed, Fuel
- 2 Digital Inputs 3.0V ... 32 V
- Trigger Input falling and rising edge -> i.e. Brake Pedal
- Analog Out 16 Bit, 0 ... 2.5 Volt
- Programmable PLL Frequency Out
- Programmable Switch Contact 50 V / 0.5 A
- all I/Os with Galvanic Isolation

- SD-Card Socket -> Card Size up to 32 GB
- Precision Real-Time Clock

Internal Sensors

Measurement range Add-on IMU

- Accelerometer 2g / 4g / 8g / 16g (default 2g)
- Resolution 16 Bit
- Output Noise 1.5 mg RMS
- Cross Axis Sensitivity 1% FSR

- Gyroscope 125 / 250 / 500 / 1000 / 2000 deg /s
- Output Noise 0.07 dps RMS
- Cross Axis Sensitivity 0.2% FSR

Measurement range barometric Altimeter

- Pressure range 50 ... 1200 kPa
- absolute Accuracy +/- 0.5 hPa

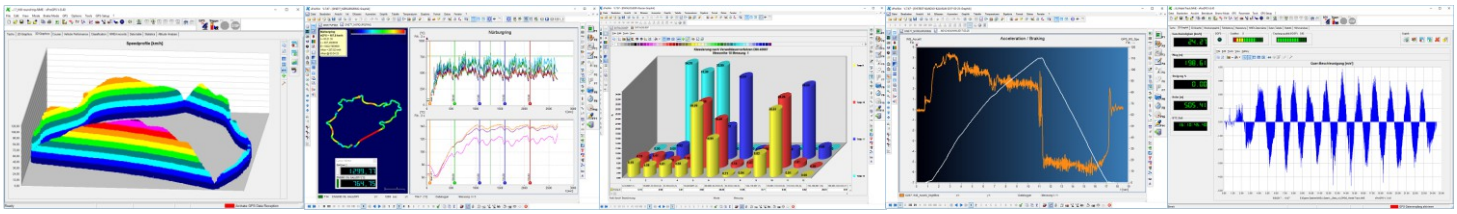
Power and Dimensions

Power Supply

- Wide Range Power Supply 10... 32VDC
- Galvanic solation
- reverse Polarity and EMC protected
- Low-Power Design
- Battery free Back-Up Buffer

Dimensions and Weight

- Dimensions 175 * 123 * 25 mm only
- Weight approx. 350 g
- Solid Alloy Housing / Quality Lemosa Sockets
- Temperature Range -40 ... +85 C°



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