GeneSys

Sensor Systems, Service & Smiles

MeasureX

Mounting offset measurement – fast, accurate and simple.

MeasureX combines a Leica Total Station with GeneSys software to deliver a complete solution for precise vehicle measurements. All measured position points are automatically converted into mounting offsets for the ADMA, antennas, additional vehicle sensors, and all relevant vehicle dimensions – with millimetre-level accuracy.

This enables mounting offsets to be measured faster and more accurately than traditional methods. Key parameters such as the geometric center, vehicle length and width, and the complete vehicle coordinate system are determined automatically.

In addition, MeasureX allows direct transmission of measured offsets to the ADMA system, providing a highly safe and efficient option for vehicle offset determination.

The GeneSys software "Offset Calculator"offers the ability to define the vehicle's polygonal shape by uploading a reference image. In addition, Euro NCAP front and rear bumper measurement points can be automatically identified, further streamlining the setup and measurement process.

KEY FEATURES

- Usable for determining:
  - vehicle dimensions
  - mounting offsets to every kind of sensor
  - location of measurement points
  - defining vehicle polygon shapes
- Fully optimized for ADMA with perfect fitting adapters
- Fully compatible for robots and targets of ABD, Stähle and 4Active
- Self-diagnostics for error detection
- Intuitive user interface
- Possibility to set favorites for optimizing repeating workflows
- Automatic documentation
- Exporting vehicle XML files which define all sensors, measurement points, dimensions and polygon shape of the vehicle

APPLICATIONS

The MeasureX can be used to determine all desired points in the vehicle. This makes it a powerful measurement system which can be used for a lot of different use cases:

- Mounting Offset measurements in X, Y and Z (Inertial Systems, Height Sensors, External Velocity Sensors, Radar Sensors, LiDAR Sensors, ...)
- Vehicle dimension measurements (Length, Width, Front Overhang, Wheelbase) with automatic calculation of geometric center and center of gravity
- Determination of Euro NCAP front and rear bumper measurement points effortlessly

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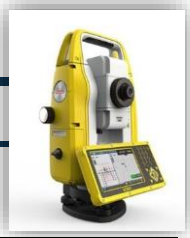
TECHNICAL DATA - ICB50



ANGULAR MEASUREMENT	
Accuracy Hz and V (absolute, continuous, diametrical)[1]	2″ / 5″
Display resolution	1″ (0.3 mgon)
Electronic level accuracy	2″

DISTANCE MEASUREMENT	
Accuracy	3 mm + 2 ppm
Range with reflectors	Up to 100 m
Laser dot size	At 30 m: 7 x 10 mm At 50 m: 8 x 20 mm At 100 m: 16 x 25 mm

GENERAL	
Internal memory	2 GB Flash
Memory card	SD card 1 GB
USB memory stick	1 GB
Interfaces	RS232, USB device, Bluetooth®
Weight	4.5 kg
Temperature range	Operating: -20 °C to +50 °C Storage: -40 °C to +70 °C
Dust / Water (IEC 60529) / Humidity	IP66 / 95 %, non condensing
Military standard	810G

[1] 1″ (0.3 mgon), 2″ (0.6 mgon), 5″ (1.5 mgon)

Laser radiation, avoid direct eye exposure.
Class 3R laser product in accordance with IEC 60825-1:2014.

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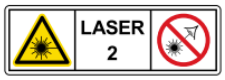
TECHNICAL DATA – ICS20

3D Point Accuracy	
Laser	At 10 m: 1.0 mm At 50 m: 2.5 mm
vPen	At 10 m: 1.5 mm
ANGULAR MEASUREMENT	
Accuracy Hz and V (1 σ)	5" (1.54 mgon)
DISTANCE MEASUREMENT	
Accuracy with vPen (1 σ)	At 10 m: 1.0 mm At 50 m: 1.5 mm
Laser dot size (visible red laser class II)	At 50 m: 17.2 x 27.3 mm
GENERAL	
Direct drives	180 °/s
Interfaces	2x USB-C, WLAN
Weight	3.37 kg
Temperature range	Operating: -20 °C to +50 °C Charging: 0 °C to +60 °C Storage: -25 °C to +70 °C
Dust / Water (IEC 60529) / Humidity	IP54
POWER MANAGEMENT	
Battery	Rechargeable Li-Ion
Operating time	> 8 h
Charging time	70 % in 1 h, 100 % in 2 h
CAMERA	
Field of view / resolution	Overview camera (diagonal): 27.6 ° / 12.33 MP On-Axis camera (diagonal): 7.5 ° / 12.33 MP Fish-eye camera (circular): ~200 ° / 13.31 MP



Laser class 2 in acc. with IEC 60825-1

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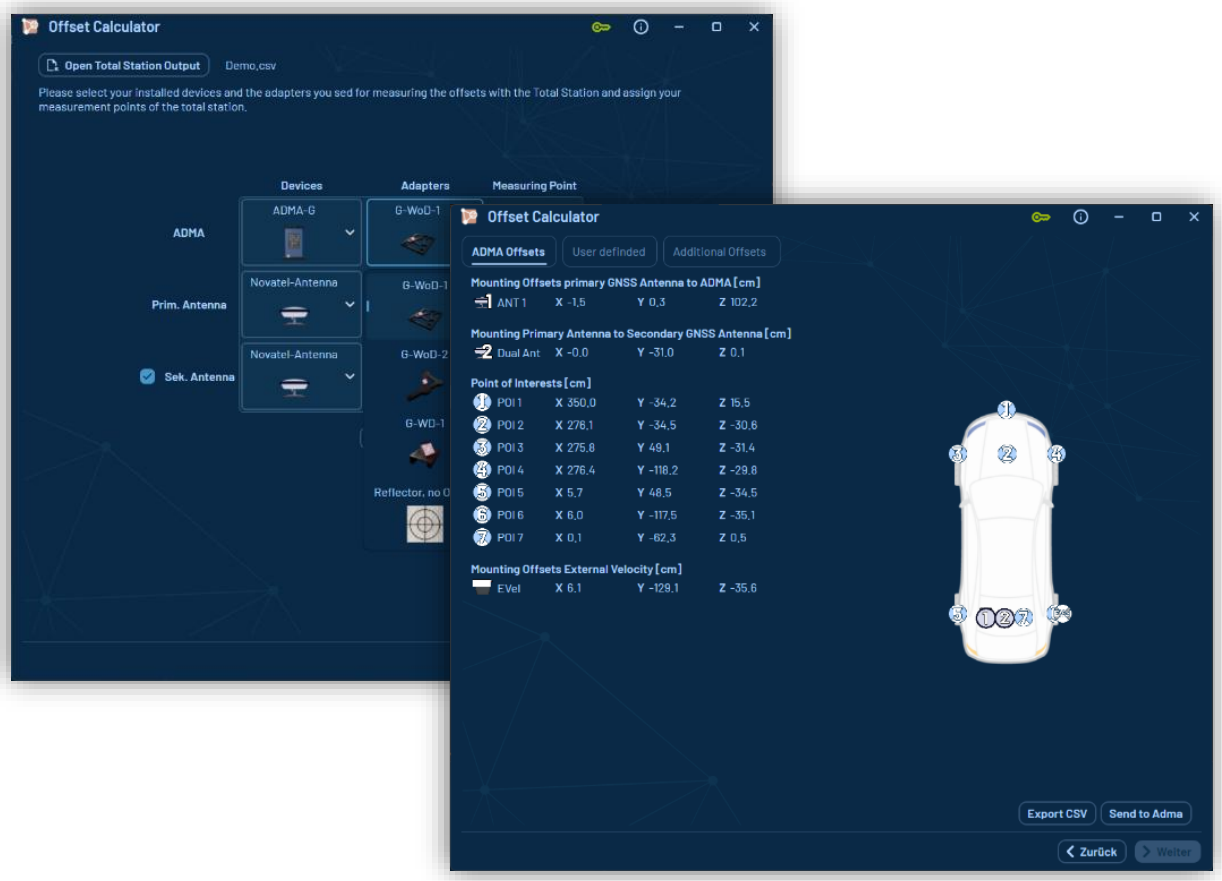
TECHNICAL DATA – MEASUREX

DISTANCE MEASUREMENT

Accuracy with ICB50	5 mm
Accuracy with ICS20	4 mm



For any further questions: support@genesys-offenburg.de