PRODUCTS

Frontal Area Measurement System - CPPMS -

Acquire • Measure • Evaluate • Align

- Quick and high-precision
- Complete and easy to use
- Low maintenance
- Customized turn-key installation

S·E·A Science & Engineering Applications Datentechnik GmbH

S.E.A. Compact Parallel Projection Measurement System (CPPMS)

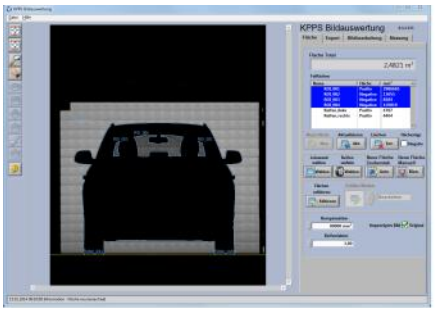
Vehicle Frontal Area Measurement

The frontal area of the vehicle and the aerodynamic forces determine the drag coefficient. The drag coefficient is a measure of the body's aerodynamic drag.
The precise measurement of the frontal area is a critical parameter for vehicle construction.

CPPMS – Patented Frontal Area Measurement System (FAMS) by S.E.A. Datentechnik GmbH

- Quick and accurate measurement of the frontal area of a vehicle in high precision within a few minutes
- Subsequent editing of the measured vehicle contour using versatile software
- Generation of a measurement report: descriptive data of the vehicle and the calculated front area
- Export of report and measurement data for further processing

Acquire



Evaluate

Report

Get the precise frontal area of your vehicle in only 3-4 minutes in the wind tunnel or a separate room

CPPMS –Optical setup

The patented optical setup consists of the light projection unit, the projection screen and the high resolution camera. Controlled with a real-time system the shadow image is typically recorded in less than one minute.

CPPMS – Software Components

- AQUIRE Acquisition software for precise acquisition and storage of the recorded shadow image
- EVAL User friendly and workflow optimized software for the exact evaluation of the frontal area
- ALIGN (optional) Automated optical alignment of the vehicle by camera-based vehicle position control in combination with an optional turntable or lift/shift table hardware

Full-Service System Integration

Together with selected regional partners S.E.A. provides the full service for planning, commissioning, training and maintenance of the turnkey system CPPMS installation.

This includes all mechanical, electrical and optical engineering as well as all components to fit the specific onsite requirements.

Customer	Location	Installation type	Regional partner
OEM	Germany	Full scale in wind tunnel	-
OEM	Germany	Full scale in wind tunnel using existing infrastructure	-
OEM	Germany	Full scale in separate room with automated alignment	EDAG
OEM	US	Frontal and side area (turntable) in separate room	EDAG USA
OEM	US	Full scale system and model system in separate room	EDAG USA
OEM	US	Full scale system in separate room	EDAG USA

Selected customer installations world-wide

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