

Description



To meet the legal requirements regarding light distribution and intensity, headlights have to be checked and adjusted.

With our Turn-key systems this can be ensured during the production of headlights or headlight modules. Our measurement technology provides fast and precise values and adjusts the headlights in shortest time.

Benefits for our customers

- Ideal for headlight production.
- Individual modules or complete headlights can be checked and adjusted.
- Suitable for all headlight systems, regardless of the used light source.
- Evaluation of all geometrical and photometric characteristics.

Technical Data

	Features, functions etc.
Light sources	Halogen, Xenon, LED, Laser, ...
Headlight types	Low beam, high beam, fog light, matrix beam, laser stimulated high beam, DRL (daytime running light), PL (position light), turn indicator, wiping turn indicator, infrared high beam (combined with any onboard NightVision system)
Geometrical adjustments	Kink point position, hotspot position low beam and high beam, sharpness and inclination of the cut-off line, intensity and intensity gradients, global and local minima and maxima
Photometric checks	
Component checks	Check of correct headlamp type (RHD/LHD/SAE/...), turn indicator functionality (conventional, wiping), color measurement (color coordinates, color temperature), detection of missing LEDs
Electrical checks	Power consumption of light sources
Mechanical checks	Gear check of the adjustment screws, check of placement motors for cornering light and levelling control
Communication	With headlight: CAN Bus/LIN Bus With rig: PLC, digital I/O Profibus, ProfiNet

Components



Light Collecting Box: As the central component, the Light Collecting Box projects the light image of the headlight on a suitable projection surface using a Fresnel lens. This allows the analysis with the built-in camera(s) and the in-house developed measurement and process software.



Software: Our image processing software developed with long-term experience precisely analyses the light image captured in the Light Collecting Box. Individual parameters, process and adjustment algorithms can be saved in a database for each headlight and vehicle type.



Adjustment tool: The lightweight and resilient VisiCon hand adjustment tools guarantee shortest adjustment times and are controlled by our software. The worker only needs to apply and enable the adjustment tool. Adjustment to the target value is automatic.



VisiCal (optional): The VisiCal is an additional device with which the Light Collecting Box and its cameras can be calibrated precisely. For this, different options are available in our software that are usable in combination with the VisiCal.