



PHASICS
The phase control company

R-Cube

ILLUMINATION MODULE FOR SID4

The R-Cube is an integrated **illumination module** for **double-pass** measurement with PHASICS SID4 wave front sensors. This compact and easy-to-use add-on device delivers a **high quality collimated beam** (optional lenses can convert to a diverging beam) and directly connects to the SID4. Embedding **all the advantages of PHASICS patented technology**, this simple set-up is used for **alignment of complex optical systems**, measurement of **large flat or curved mirrors**, and **characterization of lens assemblies**.

KEY FEATURES



Accuracy
< 20 nm RMS



Resolution
< 2 nm RMS



Insensitive
to vibration



Small footprint



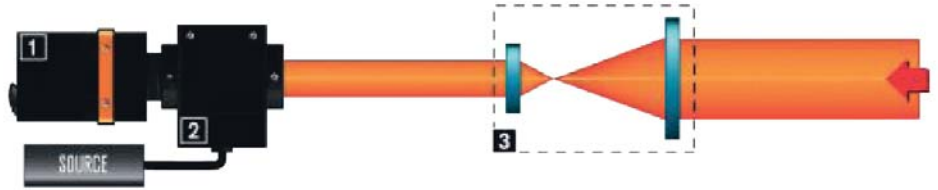
Source wavelength
customized on demand



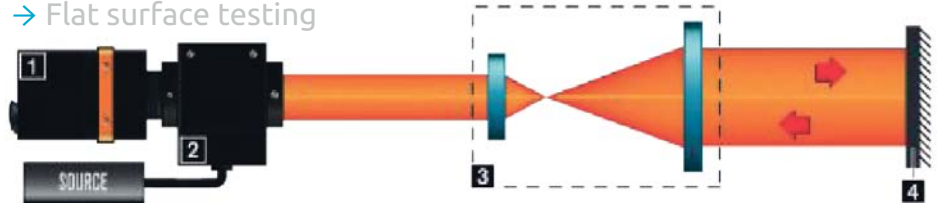
Compatible with
translation & Tip/Tilt
stages for alignment

R-Cube APPLICATIONS

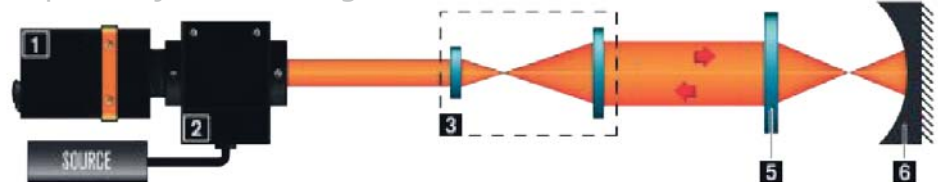
→ Automated removal of telescope aberrations in the analysis arm of adaptive optics loop



→ Flat surface testing



→ Optics quality control in double-pass: lens, objective, telescope in any size and magnification



→ Concave mirror measurement



- 1 SID4 wavefront sensor
- 2 R-Cube
- 3 Telescope / Beam expander
- 4 Surface under test
- 5 Optics under test
- 6 Reference mirror
- 7 Objective (C-mount)
- 8 Mirror under test

SPECIFICATIONS

Compatibility	SID4, SID4 HR or SWIR
Beam diameter	Adapted to related wave front sensor pupil
Source wavelength	635, 780, 808, 1064, 1550 or 1650 nm
Beam quality	< 20nm RMS (635-808 nm) < 30nm RMS (1064-1650 nm)
Double-pass reference mirror quality	$\lambda/20$ PV (633 nm)
Phase resolution (noise)	< 2 nm RMS

This document is not contractual



Distribution in the UK & Ireland



**Characterisation,
Measurement &
Analysis**

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