

STAR CORE

Core Optics



STAR CORE is a compact optics designed for the TI DLP® chip up to 0.7" diameter, orthogonal pixel architecture, and 12° tilt angle. The DLP chip illumination is well homogenous thanks to an integrator rod that acts as a convenient light input port.

Different types of light sources can be adapted: lamps, LEDs, fiber bundles, lasers.

The operating wavelength range is 405 nm - 700 nm. Based upon the patented S2+ design, the STAR CORE is assembled and tested in a high-class German optics manufacturing facility.

The STAR CORE optics offers leading edge performance in a small package and at affordable price. The rugged design proved reliable in industrial and medical environment for 3D measurement solutions, augmented reality, and intelligent lighting. STAR CORE can be used for both DLP7000 and DLP6500 DMD formats. Two mechanical interfaces are supported to mate Type A as well as s600 DMD packages. Due to the spring array mounting concept, Type A is the recommended package for applications that put high requirements on optical stability, e.g. in 3D metrology.

Specifications

| | |
|--------------------|--|
| Size | 75x75x45 [mm] |
| Weight | 216 g |
| Wavelength | 405-700 nm |
| Supported DLP chip | DLP7000, DLP6500 |
| Aperture | f/2.6...f/2,9 |
| Throw ratio | 1.8 – 2.1 |
| Zoom | 1.00 - 1.16 |
| Distortion | <0.2% |
| Working distance | 1.0 (0.4) - 10 m, (less with spacer rings) |
| Contrast ratio | FOFO 2000:1 |
| Homogeneity | +25% / -30% (IEC) |

Ordering Information

| Optics | Supported DMD type |
|----------------------|--------------------|
| STAR-07 CORE | 0.7" XGA |
| STAR-065 CORE Type A | 0.65" 1080p Type A |
| STAR-065 CORE s600 | 0.65" 1080p s600 |