

LT PR SERIES

LED PATTERN PROJECTOR

STRUCTURED LIGHT MADE EFFICIENT AND FLEXIBLE





LT PR SERIES are the most advanced and efficient devices for Pattern Projection and Structured Light applications, such as 3D reconstruction.

Unlike Laser Sources, which typically show poor line sharpness and power distribution inhomogeneity as well as scattering and diffraction effects, LT PR overcome all of these problems by integrating LED sources.

Any kind of pattern shape can be easily supplied, integrated and projected.

Different colours, included UV and IR, are available and the size of the projection area can be easily modified by interchanging the projection optics.

UNIQUE OPTICAL FEATURES:

UV  and  IR
versions available

1) PERFECTLY SHARP AND HOMOGENEOUS PROJECTED FEATURES



LT PR SERIES ensures thinner lines, sharper edges and more homogeneous illumination than lasers.



With laser emitters the illumination decays both across the line cross section and along the line width.



Laser emitters lines are thicker and edges blurred; image diffraction and speckle effects are also present.

2) ANY SHAPE CAN BE PROJECTED

LT PR projector can integrate whatever kind of 21 mm (outer) diameter pattern, with an inner active area of 11 mm. Besides off-the-shelf patterns we can easily deliver cost-effective laser engraved patterns or Chrome-on-glass photolithography patterns. The user can easily interchange the pattern unscrewing the retaining ring inside the device.



line



crosshair



reticle



stripes



whatever

3) ANY COLOUR AVAILABLE (IR AND UV INCLUDED)

VIS 1W PATTERN PROJECTION UNITS:

LTPR36/R	red light
LTPR36/G	green light
LTPR36/B	blue light
LTPR36/W	white light

VIS 3W PATTERN PROJECTION UNITS:

LTPR3W/R	red light
LTPR3W/W	white light

UV 1W PATTERN PROJECTION UNITS:

LTPR36/UV365	UV, 365 nm
LTPR36/UV385	UV, 385 nm
LTPR36/UV405	UV, 405 nm

IR 1W PATTERN PROJECTION UNITS:

LTPR36/IR890	IR, 890 nm
LTPR36/IR940	IR, 940 nm



LTPR SERIES are available in different colours.



LTPR36/UV365 with projection lens.

SOME EXAMPLES OF SUCCESSFUL APPLICATIONS:



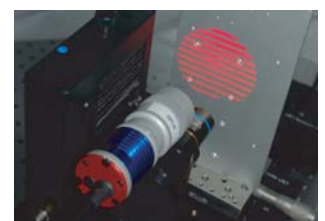
3D reconstruction



Positioning



Visualization and Mapping



Mechanical alignment

