BKL140

Backlight

Backlights provide a contrast between the profile and the bottom of the piece. With this kind of lighting we emphasize the edges of the piece on regard to its surface.

LIGHTING TECHNIQUE

Lighting mode:	Backlight, Brightfield
Light source:	396 LEDs
Colour (nm):	See table 1
LED life:	100.000 hours

MECHANICAL

LxWxH:	See external plane
Mounting:	5 (M4) & 4 (M4) Steel hardened
Housing material:	Black anodized aluminium
Weight:	610 grs.

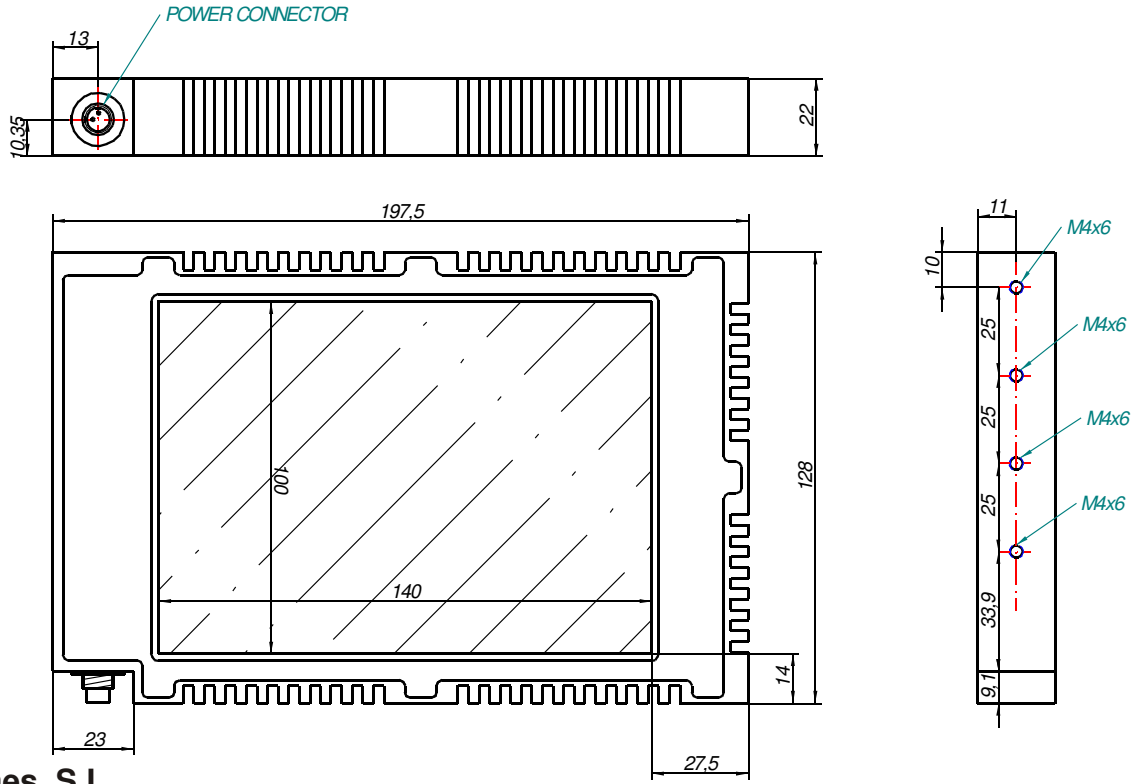
ELECTRICAL

Max. power supply:	24VDC (Continuous models)
Max. consumption:	680mA
Wire include:	IL00AA (See table 2)
Wire terminal:	Brown -> 24VDC
	Blue -> 0V (GND)

ENVIRONMENTAL

Max. Operating Humidity:	95% non-condensing
Operating temp:	0..40ºC
Storage temp:	0..60ºC

EXTERNAL PLANE



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MODELS

Table 1.

Light colour	Wavelength	Type	Reference
Red	660nm	Continuous	IL015AA
Red	660nm	Strobe	IL015AS
Near infrared	880nm	Continuous	IL015AN
Near infrared	880nm	Strobe	IL015AM
Infrared	940nm	Continuous	IL015AI
Infrared	940nm	Strobe	IL015AJ
Others	-----	????	Consult

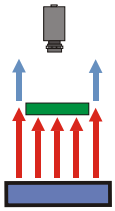
COMPLEMENTS

Table 2.

Complement	Type	Reference
Wire 1.8 m	Wire	IL000AA
Wire 2.5 m	Wire	IL000AB
Wire 4.0 m	Wire	IL000AC
Strobe controller with 3 outputs	Strobe	IL004BB

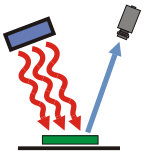
LIGHTING MODES

UNIFORM DIFFUSE BACK LIGHT



The camera heads for the source of light, seeing a uniform white surface. Any object interposed between the camera and the source of light produces a shadow detected by the camera as a black shape on the white background produced by the enlightenig, obtainig the maximum contrast. Applied in measurements it specifies the profiles of the pieces. It is also used in the measurement of transmission and impurities in transparent and traslucid objects.

BRIGHT FIELD



The light source is uniform and diffuse, and falls on a little angle of the reflecting surface of the object to inspect.
The camera is placed in the same angle so that we can have a reflected image of the light source in the surface of the inspected object. A dark spot will appear in the image taken by the camera if there is any imperfection in the object. The dark spot is due to the variation of the angle of reflexion that produces the imperfection on regard to the angle of the incident light, losing the reflect of the lighting source.