OPTO ENGINEERING

LTVTA1-W | DATASHEET

Complete View-through illuminators system - small size medium power white



KEY ADVANTAGES

Compact space-saving solution for inspection of fast moving object

Illuminates two sides of an object almost simultaneously.

Ultra-high power light output and strobe mode only operation

For the inspection of fast moving object and extended LED lifetime.

Rugged industrial design with built-in industrial connector For easy integration with any machine vision system.

Modular configuration.

The View-through system is a unique space-saving illumination solution designed to illuminate two sides of an object. It consists of two symmetrical modules, each one made of two illumination units: a diffuse strobe dome illuminator (white color) and a special active "view-through" backlight unit (white color).

SPECIFICATIONS

Lighting specifications

Illumination area diameter	(mm)	40
Optimal working distance	(mm)	5-25
Number of LEDs (Dome)		15
Light color, Peak wavelength (Dome)		white, 6000K
Spectral FWHM (Dome)	(nm)	-
Illuminance ¹ (Dome)	(klux)	490
Number of LEDs (Backlight)		158
Light color, Peak wavelength (Backlight)		white, 6000K
Spectral FWHM (Backlight)	(nm)	-
Illuminance ¹ (Backlight)	(klux)	5
Diffuser (Backlight)	(mm)	yes

Electrical specifications

Power Supply mode	(V)	Strobe only, constant current driving
Peak power Consumption	(W)	n.a.
Min pulse Current (Dome)	(A)	3.5
Max pulse Current (Dome)	(A)	7.5
Min pulse Current (Backlight)	(A)	3.5
Max pulse Current (Backlight)	(A)	17
Max pulse duration ²	(ms)	2
Max duty cycle	(%)	1.5
Estimated MTBF ³	(hours)	>50000
Connector		M8
Included cable		4x CBLT003

Mechanical specifications

Aperture diameter	(mm)	48.0	
Length	(mm)	114.0	
Width	(mm)	89.0	
Height	(mm)	107.0	
Mass	(g)	1500	

Environment

Operating temperature	(°C)	0-40
Storage temperature	(°C)	0-50
Operating relative humidity	(%)	20-85 non condensing
Installation		Indoor use only

Eye safety

Risk group (CEI EN 62471:2010)

¹ Measured at maximum current and maximum working distance
² At 25°C. At max pulse width (1ms), max pulse frequency = 15Hz
³ At 25°C

exempt

COMPATIBLE PRODUCTS

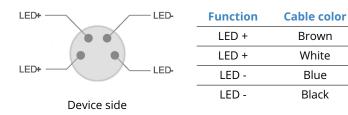
Full list of compatible products available here.



A wide selection of innovative machine vision components.

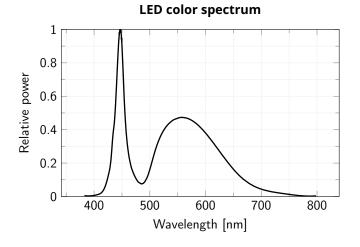
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DOME AND RINGLIGHT CONNECTOR PINOUT



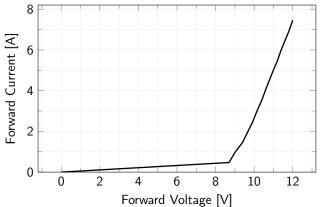
ITEMS INCLUDED IN LTVTA1-W

Description	Quantity
Dome unit	2
Active backlight view-through unit	2

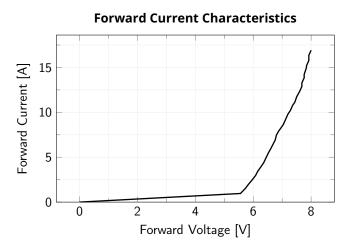


FORWARD CURRENT CHARACTERISTICS - DOME

Forward Current Characteristics



FORWARD CURRENT CHARACTERISTICS - RINGLIGHT



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