

FLOOD LIGHT

DIFFUSE AND HOMOGENEOUS ILLUMINATION

▶ MACHINE VISION APPLICATIONS ▶ LOGISTICS MARKET ▶ PALET CHECKING ▶ DIFFUSE ILLUMINATION ▶ THIN BORDERS ▶ FIT CAMERA'S OBJECTIVES

HIGH POWER FLAT ILLUMINATION DEDICATED TO LOGISTICS APPLICATIONS



- ✓ high power illumination,
- ✓ overdrive,
- ✓ satinice diffusor

The FLOOD Light by TPL Vision is a high power flat illumination, which can illuminate large areas from a distance. It is specifically dedicated to the logistics market, and in particular to the control of palletizing process.

The FLOOD Light has very thin edges and offers homogeneous light from the entire working surface, including from the edges. Thanks to the hole in the center of the Flood Light, you can insert your camera. And using the TPL Vision mounting accessories (in option), you can easily integrate it thanks to the mounting plate.

Equipped with a satin diffuser and $\pm 17^\circ$ lenses, it is available in two sizes (200x300mm and 300x600mm) and in several wavelengths (white, blue, red and infrared).

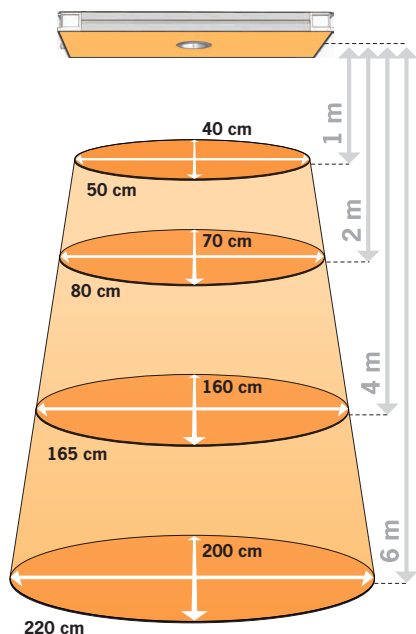
DIMENSIONS			
Width \ Length	300 mm	600 mm	
200 mm	✓		
300 mm		✓	

COLOURS			
White	Blue	Red	Infrared



LIGHTING AREA

FLOOD LIGHT 60X30 WHI



Fields of View (FoV) calculated with a lighting power between 100% and 80% (white LED).



1 METER:

100% 11 200 Lux
80% 8 960 Lux

2 METERS:

100% 3 750 Lux
80% 2 855 Lux

4 METERS:

100% 1 040 Lux
80% 830 Lux

6 METERS:

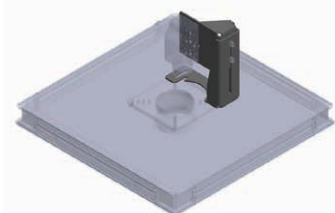
100% 550 Lux
80% 440 Lux

TECHNICAL SPECIFICATIONS

Electronics	
Power supply	24 VDC ±10%
Functioning mode	Strobe
Strobe input	PNP : From 5 to 24V for 100% ON. From 0 to 1V for 100% OFF. NPN : less than 1V for 100% ON. Above 2V for 100% OFF. Max 20V.
Overdrive	Yes
Strobe Conditions (On time, duty cycle)	3ms @ 10% at max power
Dimming	Potentiometer 30-100%
Maximum rising time	25 µs
Maximum falling time	15 µs
Wiring	1 connector M12 T-Power 12A 4 poles
Power supply cable(s) max length	Wire M12 : 10m (not supplied) Cable : 10m
Max consumption	3W/25cm ² in peak max ; 0.43W/25cm ² max on average (3ms@10%)
Optics	
Colour	White, Red, Blue, Infrared
Lenses	± 17°
Mechanics	
Thickness (mm)	45mm
Surface	300x200mm or 600x300mm
Internal diameter (mm)	65
Weight	23.8 Kg/m ² ±15%
Body materials	Aluminum and loaded ABS
Diffuser	Satinice diffuser
Fixing	4 M4 nuts (supplied) to insert in the groove or 4 M3x20 screws (not supplied)
Environment	
Operating temperature	-10° to +40°C / 80% of humidity without condensation No thermal shock (max temperature variation: 10°C in 24h)
Storage temperature	-20° to +60°C / 80% of humidity without condensation No thermal shock (max temperature variation: 10°C in 24h)
IP protection	IP 40
Labels	RoHS-CE-WEEE

RELATED PRODUCTS

Mounting accessories



Horizontal

Ref: TPL-MOUNT-MFDOME-H1

Vertical

Ref: TPL-MOUNT-MFDOME-V1

M12 female T-POWER 4 pins cable



2 meters

Ref: C-M12-4P-T-2M

5 meters

Ref: C-M12-4P-T-5M

10 meters

Ref: C-M12-4P-T-10M

Safety glasses



Ref: EYE-PROTECT

HOW TO BUILD YOUR REFERENCE

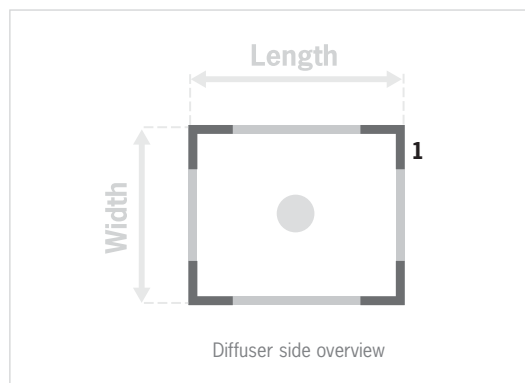
REQUIRED SETTINGS

FLOOD	VERSION	DIMENSIONS	COLOUR	LENS/ OPTIC ANGLE	WIRING	POSITION
	0 OVERDRIVE	3020 (300 x 200mm) 6030 (600 x 300mm)	WHI <input type="checkbox"/> 630 <input type="checkbox"/> 470 <input type="checkbox"/> 850 <input type="checkbox"/>	17 ± 17°	M M12 connector	1

EXAMPLES :

FLOOD Light 300x200 mm white LEDs ±17°
M12 T-Power connector position n°1 → **FLOOD-O-3020-WHI-17-M1**

FLOOD Light 600x300 mm red LEDs ±17°
M12 T-Power connector position n°1 → **FLOOD-O-6030-630-17-M1**



TPL VISION IS EXTREMELY CAREFUL ABOUT BIN SORTING IN THE SELECTION OF LEDS FOR THEIR PRODUCTS.

The human eye is particularly sensitive to color variations. Two products of the same color may appear different in the eyes of the user. However, **the maximum variation of the wavelength DOES NOT EXCEED 10 NM.**

Here are the following bandpass camera filters we recommend:

- White LEDs: no filter required
- Infrared LEDs: LP 830 (<http://midopt.com/filters/lp830/>)
- Red LEDs: BP 635 (<http://midopt.com/filters/bp635/>)
- Cyan LEDs: BP 505 (<http://midopt.com/filters/bp505/>)

We advise using bandpass filters from MidOpt: www.midopt.com

Features and presentations liable to modifications without prior notice. C-2 version, 2019/06 Edition

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Other available documents :

- PDF, DWG, DXF, STEP DRAWINGS (on demand)
- USER GUIDE

FLOOD LIGHT

