

PLD SERIES

Direct linear lights projectors

Leds bar projector that produces a great contrast and emphasizes textures, relieves and fissures of the inspected object. It operates punctually lighting because any relief, even the smallest one, produces a shadow.

► Technical specifications¹

Lighting model	PLD0602B	PLD1002A	PLD1302B	PLD1802A	PLD2602A
Dimensions	86x20x24	122x20x24	150x20x24	201x20x24	280x20x24
Active surface	64x16	100x16	128x16	180x16	259x16
RWD (mm)	>50	>50	>50	>50	>50
Weight	80g	98g	125g	150g	205g
IP rating	IP40 ²	IP40 ²	IP40 ²	IP40 ²	IP40 ²
Mounting holes	3 x 2 x M4I6	3 x 2 x M4I6	3 x 2 x M4I6	3 x 2 x M4 ⁺ 6	3 x 2 x M4I6
Connection (Type C/P/S)	2P male chassis connector PIN 1 = +24V ±3% PIN 2 = 0V	2P male chassis connector PIN 1 = +24V ±3% PIN 2 = 0V	2P male chassis connector PIN 1 = +24V ±3% PIN 2 = 0V	2P male chassis connector PIN 1 = +24V ±3% PIN 2 = 0V	2P male chassis connector PIN 1 = +24V ±3% PIN 2 = 0V
Power cable (Not-included)	VCB Series	VCB Series	VCB Series	VCB Series	VCB Series
Accessories ³					
Driver iBlueDrive ⁴	inline ST00	inline ST00	inline ST00	inline ST00	inline ST00
iBlueDrive connection	3P aerial male inline connector. L= 715mm. PIN 1 = +24V ±8% PIN 2 = 0V PIN 3 = Control ⁵	3P aerial male inline connector. L= 715mm. PIN 1 = +24V ±8% PIN 2 = 0V PIN 3 = Control ⁵	3P aerial male inline connector. L= 715mm. PIN 1 = +24V ±8% PIN 2 = 0V PIN 3 = Control ⁵	3P aerial male inline connector. L= 715mm. PIN 1 = +24V ±8% PIN 2 = 0V PIN 3 = Control ⁵	3P aerial male inline connector. L= 715mm. PIN 1 = +24V ±8% PIN 2 = 0V PIN 3 = Control ⁵
iBlueDrive power cable (Not-included)	VCC Series	VCC Series	VCC Series	VCC Series	VCC Series
iBlueDrive accessories ³					

► Instantaneous consumption⁶ (max.)

*WT

Lighting model	PLD0602B	PLD1002A	PLD1302B	PLD1802A	PLD2602A		
TYPE C 24VDC		1.3W	2.5W	3W	4.2W	5W	-470C
		0.6W	1.3W	1.4W	2.2W	2.5W	-525C
		1.8W	3.5W	2.9W	5.8W	7W	-630C
		2.2W	2.2W	3.6W	3.6W	4.3W	-850C
TYPE P Dmax= 1/2 Ton max= 60s		1.6W	3.1W	3.7W	5.3W	6.4W	-365P
		1.6W	3.1W	3.7W	5.3W	6.4W	-400P
		1.6W	3.1W	3.7W	5.3W	6.4W	-W00P
TYPE S Dmax= 1/10 Ton max= 2ms		265mA/6.4W	530mA/13W	615mA/15W	880mA/21W	1055mA/25W	-365S
		265mA/6.4W	530mA/13W	615mA/15W	880mA/21W	1055mA/25W	-400S
		265mA/6.4W	530mA/13W	615mA/15W	880mA/21W	1055mA/25W	-470S
		165mA/4W	330mA/7.9W	385mA/9.2W	550mA/13W	660mA/16W	-525S
		265mA/6.4W	530mA/13W	615mA/15W	880mA/21W	1055mA/25W	-630S
		625mA/15W	625mA/15W	1045mA/25W	1045mA/25W	1255mA/30W	-850S
		265mA/6.4W	530mA/13W	615mA/15W	880mA/21W	1055mA/25W	-W00S
		CUS	CUS	CUS	400mA/10W channel	CUS	-RGBS
		CUS	CUS	CUS	400mA/10W channel	CUS	-RGBS
TYPE I ⁷ 		1.3W[7.7W/1.1W]	2.2W[15W/1.6W]	3.2W[17W/2.5W]	3.4W[24W/2.4W]	3.9W[29W/2.8W]	-365i
		1.9W[7.7W/1.2W]	3.4W[15W/1.9W]	3.8W[17W/2.2W]	5.3W[24W/2.9W]	6.2W[29W/3.4W]	-400i
		1.8W[7.7W/1.3W]	3.1W[15W/2.2W]	3.5W[17W/2.5W]	4.8W[24W/3.4W]	5.7W[29W/3.9W]	-470i
		1.5W[4.1W/1.1W]	2.6W[7.7W/1.6W]	3W[8.9W/1.8W]	4.1W[12W/2.4W]	4.8W[15W/2.8W]	-525i
		2.6W[7.7W/1.9W]	4.8W[15W/3.4W]	5.5W[17W/3.8W]	7.7W[24W/5.3W]	9.1W[29W/6.2W]	-630i
		4.4W[15W/2.6W]	4.4W[15W/2.6W]	7.1W[24W/4.1W]	7.1W[24W/4.1W]	8.4W[29W/4.8W]	-850i
		1.9W[7.7W/1.2W]	3.4W[15W/1.9W]	3.8W[17W/2.2W]	5.3W[24W/2.9W]	6.2W[29W/3.4W]	-W00i

CUS = Custom

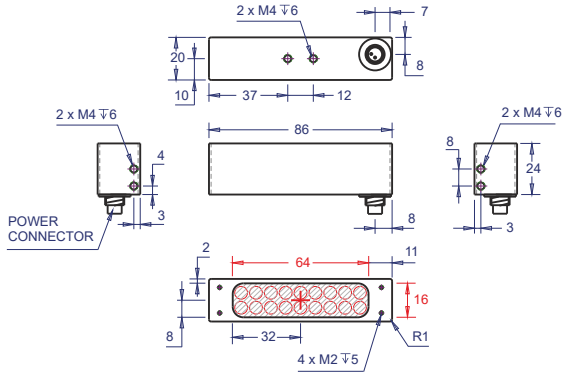
(1) Environmental specifications and iconography legend in additional annex Z4.
 (2) IP43 if the system is positioned so that the light falls vertically.
 (3) Accessories are not-included. More information in accessories section.
 (4) inLine technical drawing and specifications in additional annex Z3.1.

(5) iBlueDrive control input wiring specifications in additional annex Z2.1.
 (6) Bear in mind that consumption table is only to be used as a guide. To refer to real values, please, consult product label when purchasing.
 (7) Values of maximum instantaneous consumption of 'Type I' lighting systems in Powered mode (Strobe mode / Continuous mode)



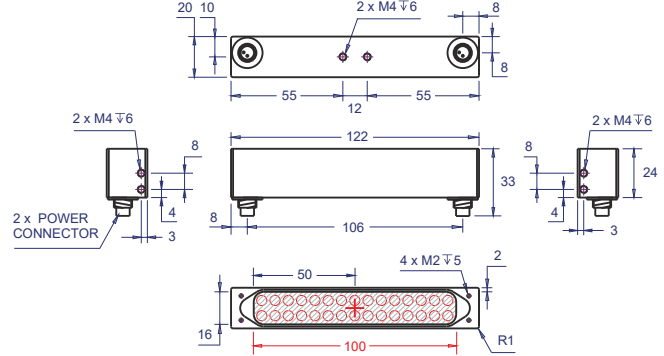
PLD SERIES

* In the iBlueDrive version, one of the chasis connectors is replaced by an aerial cable integrating the inLine driver ST00 and the connector, more info in additional annex Z3.1



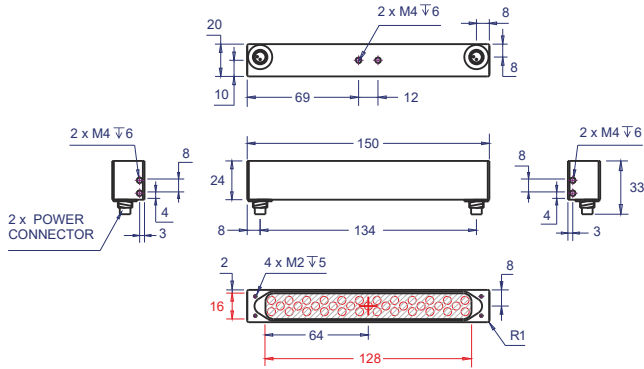
PLD0602B-E01C

* In the iBlueDrive version, one of the chasis connectors is replaced by an aerial cable integrating the inLine driver ST00 and the connector, more info in additional annex Z3.1



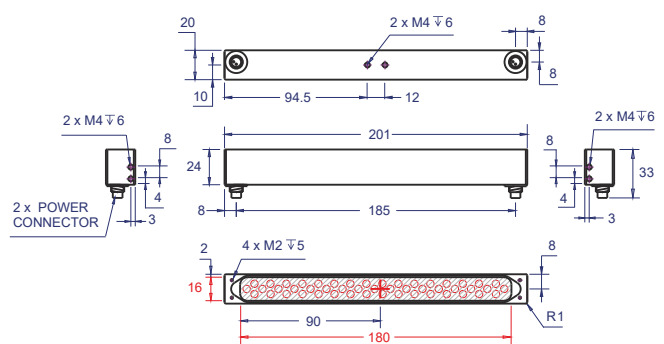
PLD1002A-E00C

* In the iBlueDrive version, one of the chasis connectors is replaced by an aerial cable integrating the inLine driver ST00 and the connector, more info in additional annex Z3.1



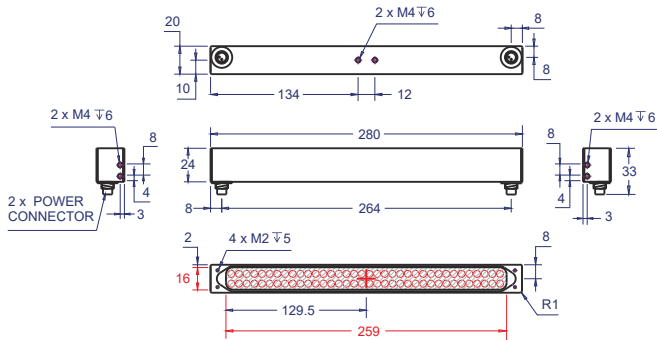
PLD1302B-E00C

* In the iBlueDrive version, one of the chasis connectors is replaced by an aerial cable integrating the inLine driver ST00 and the connector, more info in additional annex Z3.1



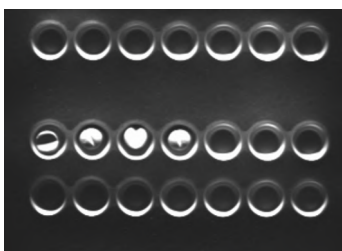
PLD1802A-E00C

* In the iBlueDrive version, one of the chasis connectors is replaced by an aerial cable integrating the inLine driver ST00 and the connector, more info in additional annex Z3.1

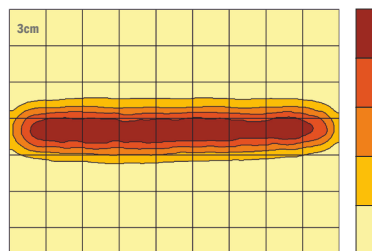


PLD2602A-E00C

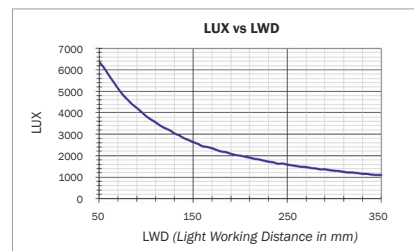
All units in millimeters, if not indicated.



Example of PLD captured image



Brightness distribution of PLD2602A-630C@50mm



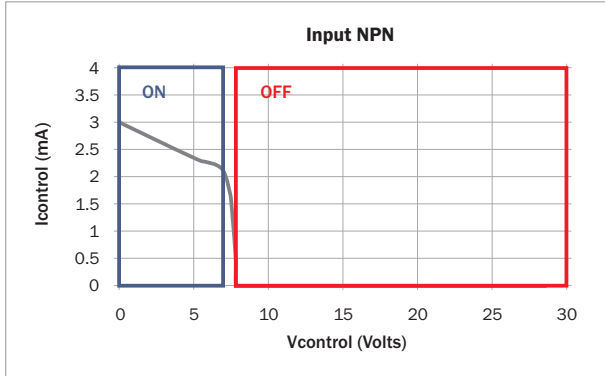
PLD2602A-630C light intensity.



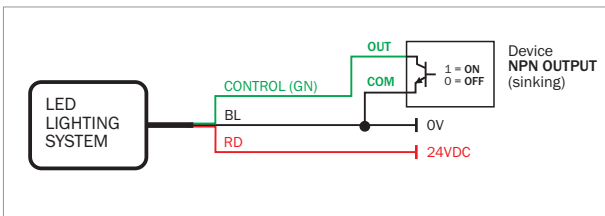
► Z1.1 - Control input NPN/PNP for 'Type C' lighting systems of DOL, PLA (PLA0513A and PLA1026A), PLC, PRC (PRC0604C and PRC0606B), PRH and PRK series.

■ NPN model (by default)

NPN chart of Vcontrol (Volts) vs Icontrol (mA)



NPN wiring for ON/OFF mode

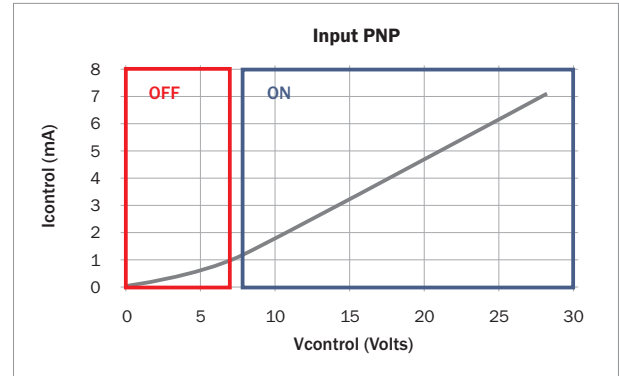


Electrical specifications

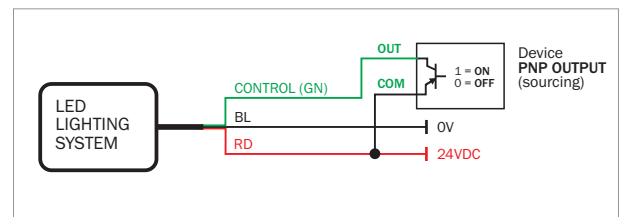
0V to +6.8V	Light ON
+7.2V to +24V	Light OFF
Working conditions	25°C, VIN = 24V
Connection	Direct to a NPN output
Delay from OFF to ON state	<5 µs
Delay from ON to OFF state	<5 µs
Bias voltage in control input	7.9V
Input impedance	7K9 Ω

■ PNP model (lighting systems with PNP modifier =/P)

PNP chart of Vcontrol (Volts) vs Icontrol (mA)



PNP wiring for ON/OFF mode



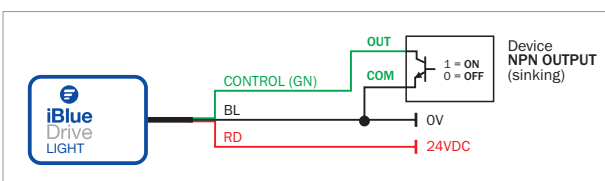
Electrical specifications

0V to +6.8V	Light OFF
+7.2V to +24V	Light ON
Working conditions	25°C, VIN = 24V
Connection	Direct to a PNP output
Delay from OFF to ON state	<5 µs
Delay from ON to OFF state	<5 µs
Bias voltage in control input	0V
Input impedance	4K Ω
Compliance	IEC1131-2 Type 1, 2 and 3

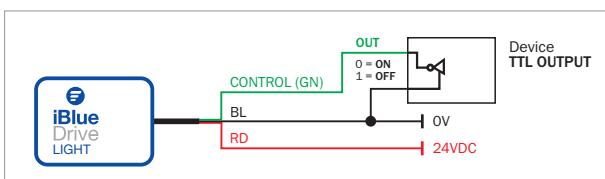
► Z2.1 - iBlueDrive control input wiring

All iBlueDrive products come together with a quick-start guide for connection and working conditions. Refer to iBlueDrive Manual for extended information.

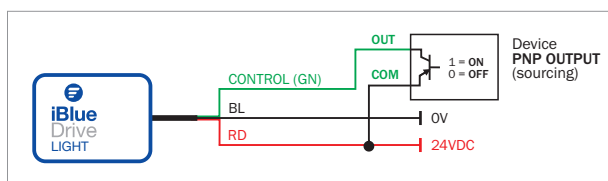
NPN wiring for strobe or ON/OFF mode



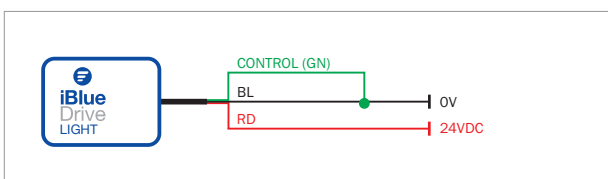
TTL wiring for strobe or ON/OFF mode



PNP wiring for strobe or ON/OFF mode



Wiring for continuous mode



► Z2.2 - iBlueDrive Accessories legend

Icon			
Description	Accessory to configure iBlueDrive devices: iBlueDrive Box / iBlueDrive USB	iBlueDrive optocoupler	iBlueDrive potentiometer
Serie/Product	VTA0005A, VTA0006A / VTA0007A	VTA0020A	VTA0030B



► Z4.1 - Environmental Specifications

Max. Operating Humidity	85% non-condensing
Operating Temperature	0 - 40°C
Storage Temperature	0 - 60°C
Housing material	Anodized aluminium
Standards	

► Z4.2 - Modifiers legend

icon	Description	Code
	Narrow angle of emission	/AN
	Medium angle of emission (default)	/AM
	Wide angle of emission	/AW
	Diffuse emission	/AD
	Polarizer filter	/FPL
	Diffuser filter	/FDR
	Backlight hole of 42mm	/H
	Backlight hole of 65mm	/H1
	Dome hole of 46mm	/CC1
	Dome hole of 40mm	/CC2
	IP Rating = IPxx = Ip65 / IP67	/65 / 67
	PNP input model	/P
	50mm focal Length	/F1
	150mm focal Length	/F2
	Infinite focal Length	/F3
	Lighting by sectors = 4 sectors	/4S

► Z4.3 - Accessories legend

icon	Description	Serie
	Power cable/s	VCB, VCC, VCD Series
	Other cable/s	VCU, VCL
	Strobe and RGB controller/s	VST, VSC Series
	Polarizer filter	VPF, VPC
	Diffuser filter	VDF
	Collimater filter on x axis, y axis or both	VCF
	Darkfield converter	VRF
	Protector filter	VPT
	Heat dissipator	VHD
	Fixing bracket	VBA, VBB, VBC Series

► Z4.4 - Technical drawings legend

icon	Description
	Optical axis
	Viewing window dimensions
	Lighting elements
	Light emission center
	Lighting surface dimensions

► Z4.5 - Colours & Wavelegths legend

icon	Wavelength	Colour	Code
	365nm	UV-	-365
	400nm	UV	-400
	470nm	BLUE	-470
	525nm	GREEN	-525
	630nm	RED	-630
	850nm/880nm	IR	-850/-880
		WHITE	-W00
		RGB	-RGB

► Z4.6 - Types of lighting legend

icon	Description
	Radial lighting
	'Darkfield' lighting effect. Low angle illumination
	Backlight illumination
	'Cloudy day' lighting effect
	'Bright field' lighting effect
	Projector lighting
	Axial lighting

► Z4.7 - Types of light legend

icon	Description
	Direct light
	Diffuse light
	Ultra-diffuse light



VISION CONSULTANCY
MAKING THE UNSEEN VISIBLE

Thank you for downloading this document from
www.machine-vision-shop.com

If you have any questions, you need help composing the
right package for your application or do you want to order?

Feel free to contact us via e-mail at sales@vision-consultancy.nl or visit our webshop.

Our vision experts are happy to help you.



Natascha Overhof



Christian Cromptvoets



VISION CONSULTANCY

Robert Schumandomein 2
6229 ES Maastricht
The Netherlands

+31 (0) 438 522 651

sales@vision-consultancy.nl
www.machine-vision-shop.com

Scan me to visit
[machine-vision-shop](http://machine-vision-shop.com)

