violumas
High Power UV LED Solutions

Driver Product Catalog

Driver Kit Products

This catalog includes information on plug-and-play driver kits which are suitable for each of the standard UV LED product lines from Violumas.

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Driver Product Catalog

Standard Driver Products

Violumas driver kits use standardized, commercially available, constant current LED drivers which are assembled for plug-and-play use and recommended for testing UV LEDs in the Violumas product line.

- Violumas drivers are assembled with a power cord and plug and are suitable for either 120VAC or 220VAC operation.
- Assembly includes a 120VAC power cord and NEMA 1-15P/5-15P plug OR 220VAC power cord and NEMA 6-15P plug.
- All driver products include a wire connection kit with 2-conductor connectors (x2) and pre-stripped wires (x2). See page 7 for a guideline on operating standard driver products with Violumas UV LEDs.
- Dimmable driver products include a dimmer dial (for adjusting driving current) and a digital panel meter (displaying current, voltage, and wattage levels).

Driver Product Family	Corresponding LEDs	Available Configurations	Page No.
PS-350A3W	WS3535C48LF-310/275/265; WC1X1C40L3-340/325	Non-Dimming (120VAC & 220VAC)	2
PS-700A6W	VC1X1C48L3-310/295/275/265	Non-Dimming (120VAC & 220VAC)	2
PS-700A3W	VC1X1C45L6-405/395/385/375/365	Non-Dimming (120VAC & 220VAC)	2
PS-1400A20W	VC2X2C48L6-310/295/275/265	Non-Dimming & Dimming (120VAC & 220VAC)	3
PS-1400A16W	VC2X2C45L9-405/395/385/375/365	Non-Dimming & Dimming (120VAC & 220VAC)	3
PS-1400A60W	VC12X1C48L6-310/295/275/265	Non-Dimming & Dimming (120VAC & 220VAC)	4
PS-700A30W	VC12X1C45L6-405/395/385/375/365	Non-Dimming & Dimming (120VAC & 220VAC)	4
PS-2100A50W	VC3X3C48L9-310/295/275/265	Non-Dimming & Dimming (120VAC & 220VAC)	5
PS-2800A95W	VC4X4C48L9-310/295/275/265	Non-Dimming & Dimming (120VAC & 220VAC)	5
PS-350A8W	WC2X2C40L9-340; WC2X2C40L6-325	Non-Dimming & Dimming (120VAC & 220VAC)	6
PS-1A12V-FAN	Fan-Cooled Heatsinks (30.4988.10/20/30/40)	120VAC & 220VAC	6

Instructions for assembling and operating driver kits can be found on Page 7 of this document.

Additional Driver Products

Violumas offers additional driver products which are suitable for powering multi-LED configurations or arrays. Contact the Violumas team to learn more about additional driver products. To learn more about the proper driver selection of LED drivers, please refer to the Application Note: LED Driver Selection Guideline.

PS-350A3W Driver Products

- Available Drivers:
  - » PS-350A3W-ND
  - » PS-350A3W-ND-220V
- Corresponding LEDs:
  - » WS3535C48LF-310/275/265
  - » WC1X1C40L3-340/325

Driver Part Number	PS-350A3W-ND	PS-350A3W-ND-220V
Assembly Includes	120VAC power cord and NEMA 1-15P plug	220VAC power cord and NEMA 6-15P plug
Manuf. Model Number	Recom RACD03-350	
Output Current	350mA	
Output Voltage	3.0V ~ 12.0V	
Rated Power	3.0W ~ 4.2W	
Input Voltage	90VAC ~ 264VAC	

PS-700A6W Driver Products

- Available Drivers:
  - » PS-700A6W-ND
  - » PS-700A6W-ND-220V
- Corresponding LEDs:
  - » VC1X1C48L3-310/295/275/265

Driver Part Number	PS-700A6W-ND	PS-700A6W-ND-220V
Assembly Includes	120VAC power cord and NEMA 1-15P plug	220VAC power cord and NEMA 6-15P plug
Manuf. Model Number	Recom RACD06-700	
Output Current	700mA	
Output Voltage	3.0V ~ 8.4V	
Rated Power	6.0W ~ 7.2W	
Input Voltage	90VAC ~ 264VAC	

PS-700A3W Driver Products

- Available Drivers:
  - » PS-700A3W-ND
  - » PS-700A3W-ND-220V
- Corresponding LEDs:
  - » VC1X1C45L6-405/395/385/375/365

Driver Part Number	PS-700A3W-ND	PS-700A3W-ND-220V
Assembly Includes	120VAC power cord and NEMA 1-15P plug	220VAC power cord and NEMA 6-15P plug
Manuf. Model Number	Recom RACD03-700	
Output Current	700mA	
Output Voltage	3.0V ~ 4.5V	
Rated Power	3.0W ~ 3.1W	
Input Voltage	90VAC ~ 264VAC	

PS-1400A20W Driver Products

- **Available Drivers:**
  - » PS-1400A20W-ND
  - » PS-1400A20W-ND-220V
  - » PS-1400A20W-D (Dimming)
  - » PS-1400A20W-D-220V (Dimming)
- **Corresponding LEDs:**
  - » VC2X2C48L6-310/295/275/265

Driver Part Number	PS-1400A20W-ND	PS-1400A20W-ND-220V	PS-1400A20W-D	PS-1400A20W-D-220V
Assembly Includes	120VAC power cord and NEMA 1-15P plug	220VAC power cord and NEMA 6-15P plug	120VAC power cord, NEMA 1-15P plug, dimmer dial, and digital panel meter	220VAC power cord, NEMA 6-15P plug, dimmer dial, and digital panel meter
Manuf. Model Number	ERP ESS020W-1400-14			
Output Current	1400mA			
Output Voltage	8.0V ~ 14.0V			
Rated Power	19.6W			
Input Voltage	120VAC ~ 277VAC			

PS-1400A16W Driver Products

- **Available Drivers:**
  - » PS-1400A16W-ND
  - » PS-1400A16W-ND-220V
  - » PS-1400A16W-D (Dimming)
  - » PS-1400A16W-D-220V (Dimming)
- **Corresponding LEDs:**
  - » VC2X2C45L9-405/395/385/375/365

Driver Part Number	PS-1400A16W-ND	PS-1400A16W-ND-220V	PS-1400A16W-D	PS-1400A16W-D-220V
Assembly Includes	120VAC power cord and NEMA 1-15P plug	220VAC power cord and NEMA 6-15P plug	120VAC power cord, NEMA 1-15P plug, dimmer dial, and digital panel meter	220VAC power cord, NEMA 6-15P plug, dimmer dial, and digital panel meter
Manuf. Model Number	MW PCD-16-1400A	MW PCD-16-1400B	MW LPF-25D-12	
Output Current	1400mA	1400mA	2100mA*	
Output Voltage	8.0V ~ 12.0V	8.0V ~ 12.0V	6.6V ~ 12.0V	
Rated Power	16.8W	16.8W	25.2W	
Input Voltage	90VAC ~ 135VAC	180VAC ~ 295VAC	90VAC ~ 305VAC	

**Note: The maximum output current for this driver kit is 2100mA. Do not exceed 1400mA driving current as to avoid over-driving the LEDs. Please refer to the corresponding LED datasheets for the recommended operating conditions.*

PS-1400A60W Driver Products

- **Available Drivers:**
  - » PS-1400A60W-ND
  - » PS-1400A60W-ND-220V
  - » PS-1400A60W-D (Dimming)
  - » PS-1400A60W-D-220V (Dimming)
- **Corresponding LEDs:**
  - » VC12X1C48L6-310/295/275/265

Driver Part Number	PS-1400A60W-ND	PS-1400A60W-ND-220V	PS-1400A60W-D	PS-1400A60W-D-220V
Assembly Includes	120VAC power cord and NEMA 1-15P plug	220VAC power cord and NEMA 6-15P plug	120VAC power cord, NEMA 1-15P plug, dimmer dial, and digital panel meter	220VAC power cord, NEMA 6-15P plug, dimmer dial, and digital panel meter
Manuf. Model Number	MW LPC-60-1400		MW LPF-60D-42	
Output Current	1400mA		1430mA	
Output Voltage	9.0V ~ 42.0V		25.2V ~ 42.0V	
Rated Power	58.8W		60.06W	
Input Voltage	90VAC ~ 264VAC		90VAC ~ 305VAC	

PS-700A30W Driver Products

- **Available Drivers:**
  - » PS-700A30W-ND
  - » PS-700A30W-ND-220V
  - » PS-700A30W-D (Dimming)
  - » PS-700A30W-D-220V (Dimming)
- **Corresponding LEDs:**
  - » VC12X1C45L6-405/395/385/375/365

Driver Part Number	PS-700A30W-ND	PS-700A30W-ND-220V	PS-700A30W-D	PS-700A30W-D-220V
Assembly Includes	120VAC power cord and NEMA 1-15P plug	220VAC power cord and NEMA 6-15P plug	120VAC power cord, NEMA 1-15P plug, dimmer dial, and digital panel meter	220VAC power cord, NEMA 6-15P plug, dimmer dial, and digital panel meter
Manuf. Model Number	MW APC-35-700		MW LPF-40D-54	
Output Current	700mA		760mA	
Output Voltage	15.0V ~ 50.0V		32.4V ~ 54.0V	
Rated Power	35W		41.04W	
Input Voltage	90VAC ~ 264VAC		90VAC ~ 305VAC	

PS-2100A50W Driver Products

- **Available Drivers:**
  - » PS-2100A50W-ND
  - » PS-2100A50W-ND-220V
  - » PS-2100A50W-D (Dimming)
  - » PS-2100A50W-D-220V (Dimming)
- **Corresponding LEDs:**
  - » VC3X3C48L9-310/295/275/265

Driver Part Number	PS-2100A50W-ND	PS-2100A50W-ND-220V	PS-2100A50W-D	PS-2100A50W-D-220V
Assembly Includes	120VAC power cord and NEMA 1-15P plug	220VAC power cord and NEMA 6-15P plug	120VAC power cord, NEMA 1-15P plug, dimmer dial, and digital panel meter	220VAC power cord, NEMA 6-15P plug, dimmer dial, and digital panel meter
Manuf. Model Number	TRP LED50W-024-C2100-D			
Output Current	2100mA			
Output Voltage	14.0V ~ 24.0V			
Rated Power	50.0W			
Input Voltage	100VAC ~ 277VAC			

PS-2800A95W Driver Products

- **Available Drivers:**
  - » PS-2800A95W-ND
  - » PS-2800A95W-ND-220V
  - » PS-2800A95W-D (Dimming)
  - » PS-2800A95W-D-220V (Dimming)
- **Corresponding LEDs:**
  - » VC4X4C48L9-310/295/275/265

Driver Part Number	PS-2800A95W-ND	PS-2800A95W-ND-220V	PS-2800A95W-D	PS-2800A95W-D-220V
Assembly Includes	120VAC power cord and NEMA 5-15P plug	220VAC power cord and NEMA 6-15P plug	120VAC power cord, NEMA 5-15P plug, dimmer dial, and digital panel meter	220VAC power cord, NEMA 6-15P plug, dimmer dial, and digital panel meter
Manuf. Model Number	TRP PLED96W-034-C2800-D			
Output Current	2800mA			
Output Voltage	12.0V ~ 34.0V			
Rated Power	95.2W			
Input Voltage	100VAC ~ 277VAC			

PS-350A8W Driver Products

- **Available Drivers:**
  - » PS-350A8W-ND
  - » PS-350A8W-ND-220V
  - » PS-350A8W-D (Dimming)
  - » PS-350A8W-D-220V (Dimming)
- **Corresponding LEDs:**
  - » WC2X2C40L9-340
  - » WC2X2C40L6-325

Driver Part Number	PS-350A8W-ND	PS-350A8W-ND-220V	PS-350A8W-D	PS-350A8W-D-220V
Assembly Includes	120VAC power cord and NEMA 1-15P plug	220VAC power cord and NEMA 6-15P plug	120VAC power cord, NEMA 1-15P plug, dimmer dial, and digital panel meter	220VAC power cord, NEMA 6-15P plug, dimmer dial, and digital panel meter
Manuf. Model Number	ERP ESS010W-0350-24			
Output Current	350mA			
Output Voltage	14.0V ~ 24.0V			
Rated Power	8.4W			
Input Voltage	120VAC ~ 277VAC			

PS-1A12V-FAN Driver Products

- **Available Drivers:**
  - » PS-1A12V-FAN
  - » PS-1A12V-FAN-220V
- **Corresponding Products:**
  - » 30.4988.10
  - » 30.4988.20
  - » 30.4988.30
  - » 30.4988.40

Driver Part Number	PS-1A12V-FAN	PS-1A12V-FAN-220V
Assembly Includes	120VAC/220VAC power cord and NEMA 1-15P plug*	
Manuf. Model Number	TT T6639ST	
Output Current	0.0A ~ 1.0A	
Output Voltage	+12.0V	
Rated Power	12.0W	
Input Voltage	90VAC ~ 264VAC	

**Note: There is only one plug option (NEMA 1-15P) for this driver kit and the use of a universal plug adapter may be needed. The power cord is rated for 90VAC ~ 264VAC.*

Operation of Driver Kits with Violumas UV LEDs

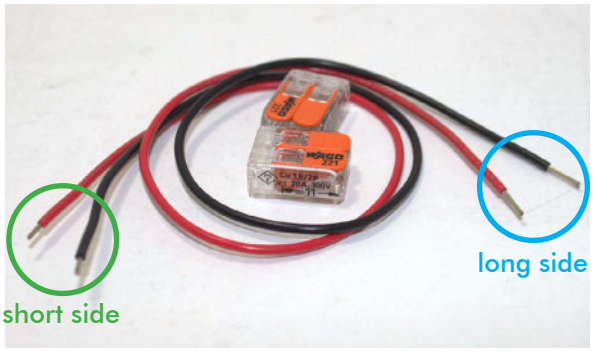
Notes for Operation

- Ensure you are utilizing the correct driver kit for the corresponding LED.
- Ensure that the LED is mounted onto a proper cooling solution (heatsink) before turning the LED on.
- When plugging in the driver kit, the use of a power strip with an on/off switch is recommended.
- If operating outside of North America, the use of a universal plug adapter is recommended.
- If operating a dimmable driver kit (with a dimmer dial), ensure the dimmer dial is set to the lowest setting before plugging in the driver kit. After turning the driver on, increase the driving current gradually to the target value (do not exceed the recommended current on the LED datasheet).

Wire Connection Kit (Included in Driver Kit)

The wire connection kit includes 2-conductor connectors (x2) and positive and negative wires (x2).

- Each wire is pre-stripped for plug-and-play connections and has a length of approximately 300 mm.
- One end of each wire is stripped approximately 5 mm (short side). The short side should be inserted into the connector of the COB LED (or soldered onto the electrodes of the SMD LED's PCB).
- One end of each wire is stripped approximately 10 mm (long side). The long side should be coupled with the driver wires using the included 2-conductor connectors.



Connecting Wires to the COB LED

- Insert the short side of the negative/black wire into the negative COB connector.
- Insert the short side of the positive/red wire into the positive COB connector.
- For connecting the wires to the COB LED, insert the wire end fully into the appropriate COB connector (positive to positive, negative to negative). The connection should be tight even with a weak pull on the end of the wire. Direct insertion of the wire is recommended (soldering is not required).

Connecting Wires to the Driver

- Couple the long side of the negative/black wire to the negative/black wire of the driver using the provided 2-conductor connector.
- Couple the long side of the positive/red wire to the positive/red wire of the driver using the provided 2-conductor connector.
- For coupling wires with the provided connector, please insert the wire end fully into an unoccupied terminal and snap the connector shut. The connection should be tight even with a weak pull on the ends of the wires. Please ensure positive and negative wires are connected appropriately (positive to positive, negative to negative).

Disclaimer: Driver kits are intended for operating Violumas UV LED products. Violumas is not responsible for any damages that may result from inaccurate use of the recommended products. Violumas does not make any claims regarding warranty or guarantee of these products. It is recommended that each customer consults the Violumas engineering team before engaging Violumas products in extreme applications where the failure of the LED and damage to human health may be possible. Each user assumes full responsibility for determining the suitability of the use of Violumas products in various applications. Operating Violumas LEDs incorrectly or with an unsuitable driver may result in immediate failure and Violumas will not be responsible for replacement.