



 **Boston**Electronics

Product Catalog

Driver Product Catalog

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

October 27, 2023

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 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 5 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 Part Number	Description	Corresponding LED	Page No.
PS-350A3W-ND	Non-Dimming; 120VAC	WS3535C48LF-310/275/265 WC1X1C40L3-340/325	2
PS-350A3W-ND-220V	Non-Dimming; 220VAC		
PS-700A6W-ND	Non-Dimming; 120VAC	VC1X1C48L3-310/295/275/265	2
PS-700A6W-ND-220V	Non-Dimming; 220VAC		
PS-700A3W-ND	Non-Dimming; 120VAC	VC1X1C45L6-405/395/385/375/365	2
PS-700A3W-ND-220V	Non-Dimming; 220VAC		
PS-1400A20W-ND	Non-Dimming; 120VAC	VC2X2C48L6-310/295/275/265	3
PS-1400A20W-ND-220V	Non-Dimming; 220VAC		
PS-1400A20W-D	Dimming; 120VAC		
PS-1400A20W-D-220V	Dimming; 220VAC		
PS-1400A16W-ND	Non-Dimming; 120VAC	VC2X2C45L9-405/395/385/375/365	3
PS-1400A16W-ND-220V	Non-Dimming; 220VAC		
PS-1400A16W-D	Dimming; 120VAC		
PS-1400A16W-ND-220V	Dimming; 220VAC		
PS-1400A60W-ND	Non-Dimming; 120VAC	VC12X1C48L6-310/295/275/265	4
PS-1400A60W-ND-220V	Non-Dimming; 220VAC		
PS-1400A60W-D	Dimming; 120VAC		
PS-1400A60W-D-220V	Dimming; 220VAC		
PS-700A30W-ND	Non-Dimming; 120VAC	VC12X1C45L6-405/395/385/375/365	4
PS-700A30W-ND-220V	Non-Dimming; 220VAC		
PS-700A30W-D	Dimming; 120VAC		
PS-700A30W-D-220V	Dimming; 220VAC		

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

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

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

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
Manuf. Model Number	ERP ESS020W-1400-14	ERP ESS020W-1400-14	ERP ESS020W-1400-14	ERP ESS020W-1400-14
Output Current	1400mA	1400mA	1400mA	1400mA
Output Voltage	8.0V ~ 14.0V	8.0V ~ 14.0V	8.0V ~ 14.0V	8.0V ~ 14.0V
Rated Power	19.6W	19.6W	19.6W	19.6W
Input Voltage	120VAC ~ 277VAC	120VAC ~ 277VAC	120VAC ~ 277VAC	120VAC ~ 277VAC
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

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
Manuf. Model Number	MW PCD-16-1400A	MW PCD-16-1400B	MW LPF-25D-12	MW LPF-25D-12
Output Current	1400mA	1400mA	2100mA	2100mA
Output Voltage	8.0V ~ 12.0V	8.0V ~ 12.0V	6.6V ~ 12.0V	6.6V ~ 12.0V
Rated Power	16.8W	16.8W	25.2W	25.2W
Input Voltage	90VAC ~ 135VAC	180VAC ~ 295VAC	90VAC ~ 305VAC	90VAC ~ 305VAC
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

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
Manuf. Model Number	MW LPC-60-1400	MW LPC-60-1400	MW LPF-60D-42	MW LPF-60D-42
Output Current	1400mA	1400mA	1430mA	1430mA
Output Voltage	9.0V ~ 42.0V	9.0V ~ 42.0V	25.2V ~ 42.0V	25.2V ~ 42.0V
Rated Power	58.8W	58.8W	60.06W	60.06W
Input Voltage	90VAC ~ 264VAC	90VAC ~ 264VAC	90VAC ~ 305VAC	90VAC ~ 305VAC
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

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
Manuf. Model Number	MW APC-35-700	MW APC-35-700	MW LPF-40D-54	MW LPF-40D-54
Output Current	700mA	700mA	760mA	760mA
Output Voltage	15.0V ~ 50.0V	15.0V ~ 50.0V	32.4V ~ 54.0V	32.4V ~ 54.0V
Rated Power	35W	35W	41.04W	41.04W
Input Voltage	90VAC ~ 264VAC	90VAC ~ 264VAC	90VAC ~ 305VAC	90VAC ~ 305VAC
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

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.