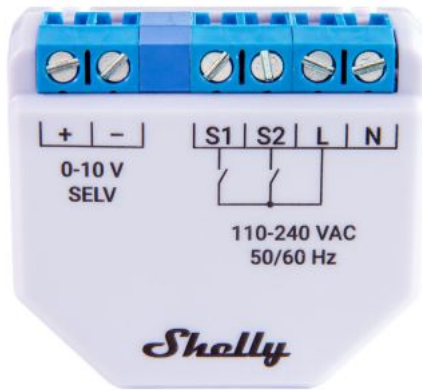




Home > Documentation > Shelly Plus 0 10v Dimmer

Shelly Plus 0 10v Dimmer



Device identification

- Device name: **Shelly Plus 0-10V Dimmer**
- Device model: **SNDM-00100WW**
- Device SSID: **ShellyPlus010V-XXXXXXXXXX**
- Device Bluetooth ID: **0x1070 / 0x0780 (GAP)**

Short description

Shelly Plus 0-10V Dimmer (the Device) is a smart 0-10V dimming controller which allows remote control 0-10V dimming drivers through a mobile phone, tablet, PC, or home automation system. It can work standalone in a local Wi-Fi network or it can also be operated through cloud home automation services.

Shelly Plus 0-10V Dimmer can be accessed, controlled, and monitored remotely from any place where the User has internet connectivity, as long as the device is connected to a Wi-Fi router and the Internet.

Shelly Plus 0-10V Dimmer has an embedded Web Interface which can be used to monitor and control the device, as well as adjust its settings.

Main features

- **Diverse driver integration:** Supports 0-10V signal control for multiple types of drivers (lights, motors, valves, etc.).
- **Shelly Plus Add-on compatible:** The Device supports connection with the sensor interface to the Shelly Plus devices.
- **Switch/Button input mode:** Allows flexible input control through switches or buttons.
- **One/dual button dimming control:** Allows to use the full functionalities of the Device for dimming control with any wall switch configuration.
- **Night mode:** Enables to set a specific brightness of input lights during nighttime.
- **Min/Max brightness:** Reframes the range of the dimming signal to get more precise brightness control on the output.
- **Button fade rate:** Controls how quickly the output brightness changes while holding the button(s).
- **Transition duration:** Controls the time for dimming from 0 to 100 %.
- **Schedules:**
 - **Basic schedules:** Supports weekly schedules and routines, including setting of brightness, transition duration, and flip value of the dimming signal.

- **Advanced schedules:** Supports detailed schedules and routines throughout the year with a broad range of time adjustments from seconds to months, including setting of brightness, transition duration, and flip value of the dimming signal.
- **Auto on/off timers:** Enables auto on/off timer setting.
- **Local actions:** Allows creating automation scenarios within the local Wi-Fi network, including setting of brightness, transition duration, and flip value of the dimming signal.
- **Webhooks:** Support automation through lightweight, event-driven communication with other devices.
- **BLE Gateway:** Facilitates communication between BLE and Wi-Fi-enabled devices.
- **Wi-Fi Range Extender:** Retransmits the Wi-Fi signal and extends its reach.
- **Scripting:** Allows creating automation scenarios through scripts.
- **Compatibility:** Highly compatible with 3rd Party home automation systems.
- **No need for hub:** Ready for use locally or remotely via Shelly Smart Control or 3rd Party systems.

Main applications

- Residential
- MDU (Multi Dwelling Units - apartments, condominiums, hotels, etc.)...
- Light commercial (small office buildings, small retail/restaurant/gas station, etc.)...
- Government/municipal
- University/college
- Farming

Use cases

- Supports 0-10V signal control for multiple types of drivers (lights, motors, valves, etc. depending on the driver)
- Control fan speed, if the motor or motor inverter has a 0-10V input. (Web interface will display light control interface.)
- Control valves, if the valve has a 0-10V input. (Web interface will display light control interface.)

Integrations

Amazon Alexa supported capabilities

Yes

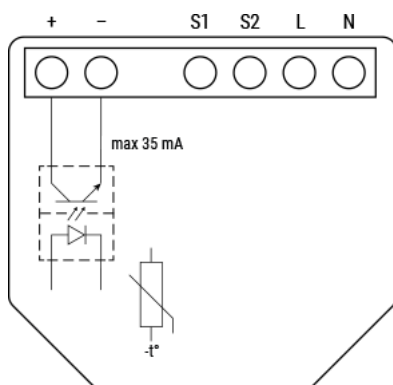
Google Smart Home supported traits

Yes

Samsung SmartThings supported capabilities

Yes

Simplified internal schematics



Device electrical interfaces

Inputs

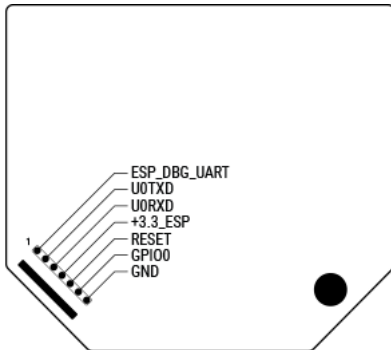
- 2 switch/button inputs on screw terminals: **S1** and **S2**
- 2 power supply inputs on screw terminals: **1 N** and **1 L**

Outputs

- 2 0-10V outputs on screw terminals: **+** and **-**

Add-on interface

- Shelly proprietary serial interface



⚠CAUTION! High voltage on the add-on interface when the Device is powered!

Connectivity

- Wi-Fi
- Bluetooth

Safety function

- Overheating protection

Supported load types

- 0-10V signal control for multiple types of drivers (lights, motors, valves, etc.)

User interface

Inputs

- One (Control) button
 - Press and hold for 5 seconds to enable Device access point and Bluetooth connection.
 - Press and hold for 10 seconds to factory reset the Device.

Outputs

- LED (monocolor) indication
 - AP (Access Point) enabled and Wi-Fi disabled:
1 second ON / 1 second OFF
 - Wi-Fi enabled, but not connected to a Wi-Fi network:
1 second ON / 3 seconds OFF
 - Connected to a Wi-Fi network:
Constantly ON

- Cloud is enabled, but not connected:
1 second ON / 5 seconds OFF
- Connected to Shelly Cloud:
Constantly ON
- OTA (Over the Air Update):
½ sec ON / ½ second OFF
- Button pressed and held for 5 seconds:
½ second ON / ½ second OFF
- Button presses and held for 10 seconds:
¼ second ON / ¼ second OFF

The list above starts with the initial device status and the lowest priority. Every next state cancels the previous one.

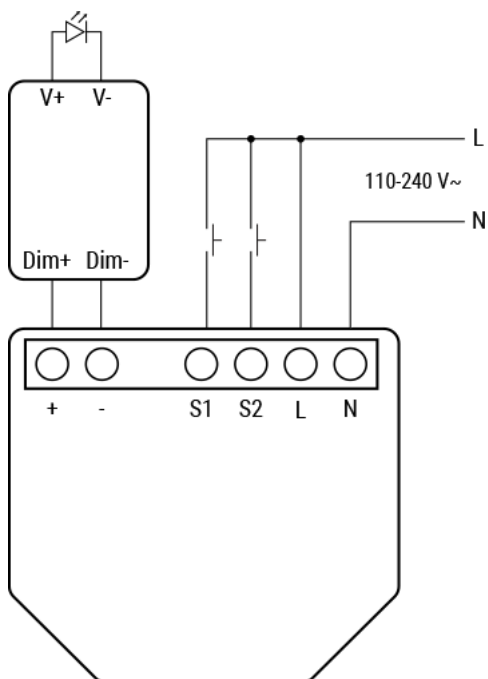
Specifications

Quantity	Value
Physical	
Size (HxWxD):	42x37x17 ±0.5 mm / 1.65x1.46x0.66 ±0.02 in
Weight:	17 g / 0.60 oz
Screw terminals max torque:	0.4 Nm / 3.5 lbin
Conductor cross section:	0.5 to 1.5 mm² / 20 to 16 AWG (solid, stranded, and bootlace ferrules)
Conductor stripped length:	5 to 6 mm / 0.20 to 0.24 in
Mounting:	In-wall
Shell material:	Plastic
Shell color:	Shell: 2716C, print: black
Environmental	
Ambient working temperature:	-20 °C to 40 °C / -5 °F to 105 °F
Humidity:	30 % to 70 % RH
Max. altitude:	2000 m / 6562 ft

Electrical	
Power supply:	110 - 240 VAC ±10%
Power consumption:	< 1.2 W
Neutral not needed:	No
0-10V voltage control type:	Current sinking
Output circuits ratings	
Max. switching voltage:	10 VDC
Max. switching power:	0.35 W
Max. switching current:	35 mA
Sensors, meters	
Internal-temperature sensor:	Yes
Radio	
Wi-Fi	
Protocol:	802.11 b/g/n
RF band:	2401 - 2495 MHz
Max. RF power:	< 20 dBm
Range:	Up to 30 m / 100 ft indoors and 50 m / 160 ft outdoors (Depends on local conditions)
Bluetooth	
Protocol:	4.2

RF band:	2400 - 2483.5 MHz
Max. RF power:	< 4 dBm
Range:	Up to 10 m / 33 ft indoors and 30 m / 100 ft outdoors (Depends on local conditions)
Microcontroller unit	
CPU:	ESP32-U4WDH
Flash:	4 MB
Firmware capabilities	
Schedules:	20
Webhooks (URL actions):	20 with 5 URLs per hook
MQTT:	Yes
Scripting:	Yes

Basic wiring diagrams



Legend

Terminals		Wires	
+	0-10 VDC positive terminal	L	Live (110-240 V) wire
-	0-10 VDC negative terminal	N	Neutral wire
S1	Switch/button input terminals for light control		
S2	Switch/button input terminals for light control		
L	Live (110-240 V) terminal		
N	Neutral terminal		

Components and APIs

- [This device](#)
- [All Shelly devices and services](#)

Compliance

[Shelly Plus 0-10V Dimmer multilingual EU declaration of conformity.pdf](#)

[Shelly Plus Dimmer 0-10V UK PSTI ACT Statement of compliance.pdf](#)

Printed user guide

[Shelly Plus 0-10V Dimmer multilingual printed user and safety guide.pdf](#)

Installation guides

Sign up for our newsletter

Enter your email address

☐ By checking this box, I consent to receive newsletters and marketing information via e-mail in accordance with the [Privacy Policy](#). I am aware that I can unsubscribe at any time.



Company

Help

Learn

Information

© Copyright Shelly 2025.