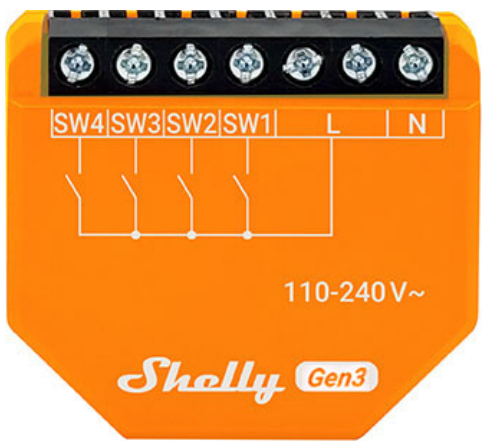
Shelly I4 Gen3



Device identification

- Device name: **Shelly i4 Gen3**
- Device model: **S3SN-0024X**
- Device SSID: **ShellyI4G3-XXXXXXXXXXXX**
- BLE Model ID: **0x1812**

Short description

Shelly i4 Gen3 is a smart Wi-Fi switch input that allows you to manually activate or deactivate any created scene, run synchronized actions, or execute complex trigger scenarios. You can use Shelly i4 Gen3 to control other connected Shelly switches, sensors, or HTTP and MQTT-controlled devices. Small enough to fit behind every wall switch, Shelly i4 Gen3 can show the status and control the action of four inputs. The device also has improved processor and increased memory compared to its predecessor.

You can access and monitor Shelly i4 Gen3 remotely from any place where you have internet connectivity, if the Device is connected to a Wi-Fi router and the Internet.

You can retrofit the Device into standard electrical wall boxes, behind power sockets, light switches, or into other places with limited space.

Shelly i4 Gen3 has an embedded Web Interface that you can use to control it and set it up.

Main features

- **Wi-Fi Connectivity:** The device can connect to your home Wi-Fi network, allowing you to remotely monitor humidity and temperature data through a smartphone app or other compatible devices.
- **Integration with Alexa:** You can integrate the Shelly i4 Gen3 with Alexa. This enables voice control and automation capabilities through the platform.
- **Local and Cloud Control:** Can function independently in a local Wi-Fi network and can also be operated through cloud home automation services.
- **Bluetooth Connectivity:** Bluetooth and BLE gateway are available for inclusion purposes, which may be useful during the setup process.
- **User-Friendly Interface:** The device provides a user-friendly interface with a reset button for manual interactions.
- **Improved Processor and Memory:** Upgraded with an improved processor and increased memory for enhanced performance.
- **Embedded Web Interface:** Features an embedded web interface for monitoring, control, and adjustment of settings.
- **Wireless Connectivity:** The device supports Wi-Fi (802.11 b/g/n) and Bluetooth 4.2 protocols with specified indoor and outdoor range capabilities.
- **BLE Gateway:** Bridge between your Shelly BLU devices and the wider Shelly ecosystem. It receives Bluetooth signals and sends them to the cloud or locally to another non-bluetooth device.
- **Wi-Fi Range extender for IoT devices:** A Wi-Fi extender is employed to expand the reach of your Wi-Fi network by receiving your current Wi-Fi signal, enhancing its strength, and then transmitting the enhanced signal over a wider area.
- **Scripting:** https://shelly-api-docs.shelly.cloud/gen2/Scripts/ShellyScriptLanguageFeatures/
- **Wide range of integrations:** The device can be integrated with 3rd party home systems, documented HTTP API, MQTT(s), Web Hooks over HTTP and HTTPS, UDP
- **Virtual Components:** https://shelly-api-docs.shelly.cloud/gen2/DynamicComponents/Virtual/

Use cases

- **Remote Appliance Control:** Turn on or off electric appliances remotely using your mobile phone, tablet, PC, or home automation system.
- **Internet-Connected Convenience:** Access and control devices from anywhere with internet connectivity, as long as the Shelly i4 Gen3 is connected to a Wi-Fi router.
- **Home Automation:** Shelly i4 Gen3 enables automatic control of power appliances for more relaxing and enjoyable experience.

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

Integrations

Amazon Alexa supported capabilities

Yes - through a virtual device routine

Google Smart Home supported traits

No

Samsung SmartThings supported capabilities

No

Simplified internal schematics

N/A for this device.

Device electrical interfaces

Inputs

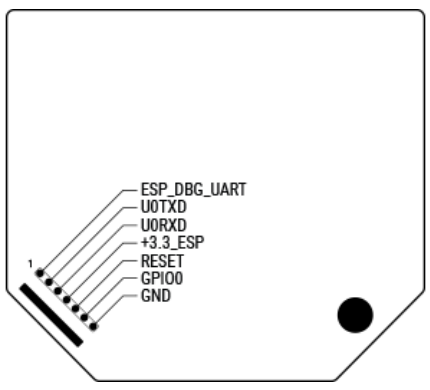
- 4 switch/button inputs on screw terminal: SW1, SW2, SW3, and SW4
- 3 power supply inputs on screw terminals: 1 N and 2 L

Outputs

N/A

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

User interface

Inputs

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

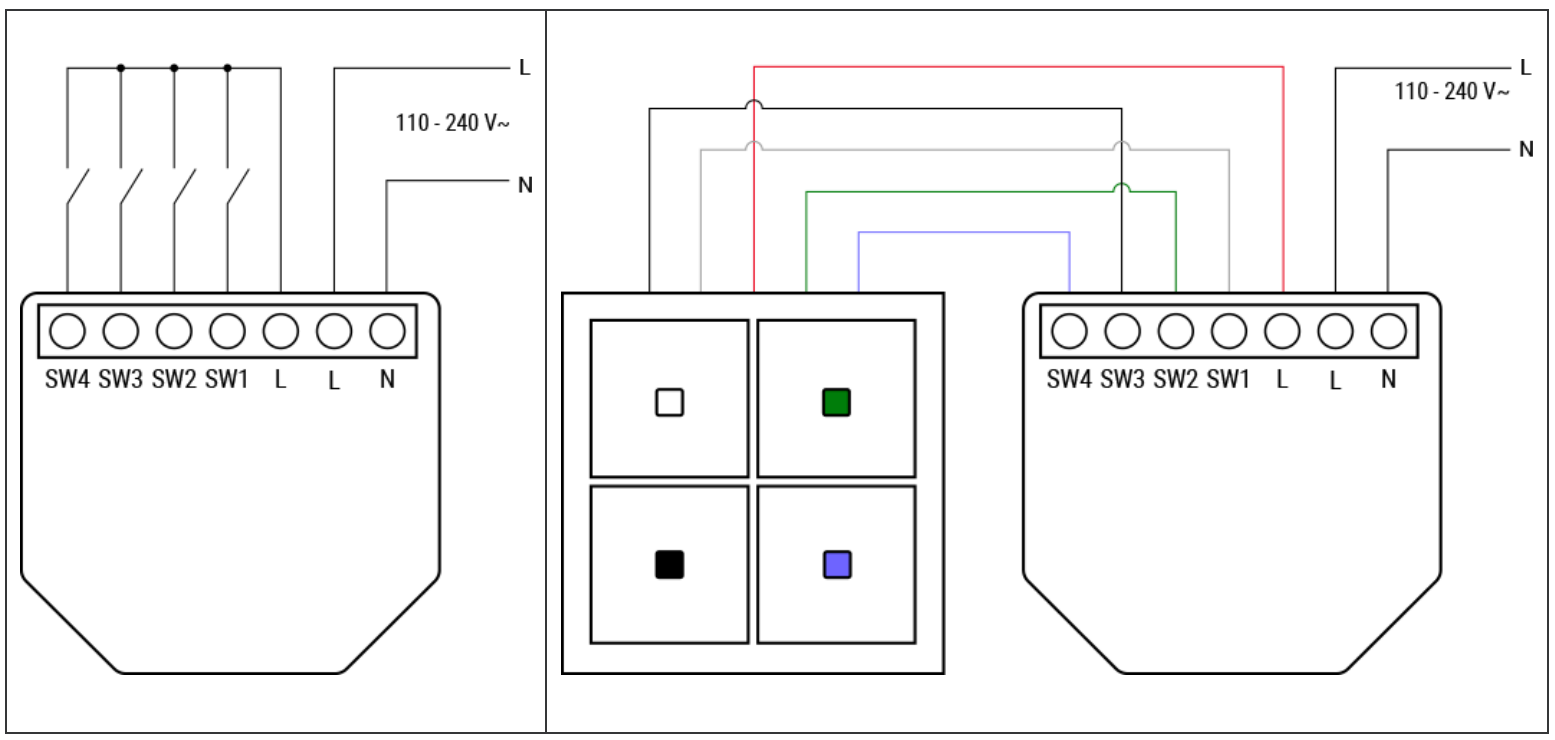
- Press and hold for 10 seconds to factory reset the Device.

Specifications

Quantity	Value
Physical	
Size (HxWxD):	37x42x16 / 1.46x1.65x0.63
Weight:	19 g / 0.67 oz
Screw terminals max torque:	0.4 Nm / 3.5 lbin
Conductor cross section:	0.5 to 4 mm² / 20 to 11 AWG (solid, stranded, and bootlace ferrules)
Conductor stripped length:	6 to 7 mm / 0.24 to 0.28 in
Mounting:	Wall box
Shell material:	Plastic
Shell color:	Orange
Terminal Color	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 V~ 50/60 Hz
Power consumption:	< 1 W
Sensors, meters	
Internal-temperature sensor:	Yes
Radio	
Wi-Fi	
Protocol:	802.11 b/g/n
RF band:	2401 - 2483 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 with BLE
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:	ESP-Shelly-C38F
Flash:	8MB
Firmware capabilities	
Webhooks (URL actions):	20 with 5 URLs per hook
Scripting:	Yes
MQTT:	Yes

Basic wiring diagrams



Legend

Terminals		**Wires**	
SW1, **SW2**, **SW3**, **SW4**	Switch/button input terminals	**L**	Live wire (110-240 V~)
L	Live terminal (110-240 V~)	**N**	Neutral wire
N	Neutral terminal		