

# UPS-12V/1A - User Guide



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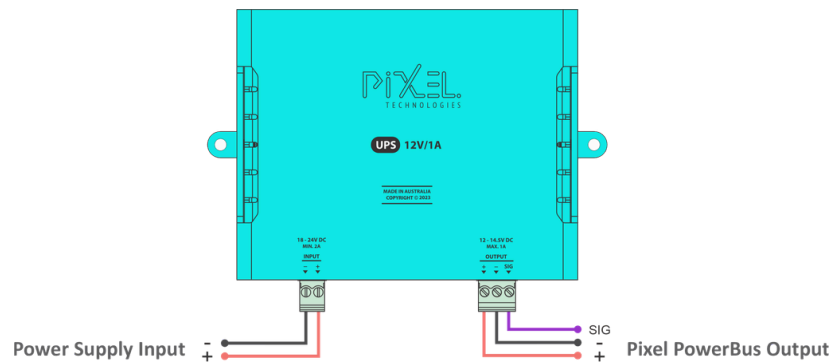


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## Description

Introducing the UPS-12V/1A, a reliable uninterruptible power supply that provides continuous power up to 1A. Featuring advanced lithium-ion battery technology, it's perfect for various applications. Designed for seamless integration with Pixel's IoT devices via the 3-wire PowerBus interface, its compact and efficient design ensures your devices are protected from power interruptions.

## Wiring Overview



## Installation

1. Mount the UPS-12V/1A at your desired install location.
2. Connect the 3-wire PowerBus output to your Pixel device.
3. Connect an 18V - 24V DC power source to the Input (+/-) terminal.

**i** The 3-wire output is designed to interface with Pixel's 3-wire PowerBus-enabled products. When connecting to systems not equipped with this interface, connect a 4.7k Ohm resistor between the V+ and SIG output terminals. If the system does not see this signature resistor, it will shut down when in battery backup mode.

## System LED Indicators

System LED	Color	Status	Description
●	Red	ON	Input Power Present   Battery Charging
●	Green	ON	Input Power Present   Charging Complete
●	Blue	ON	No Input Power   On Battery Backup
● ●	Red ↔ Green	Toggling	Battery Fault / Missing

## Battery Replacement [↗](#)

1. Remove power from the system.
2. Remove the hex screw from each side of the case and lift the top cover.
3. Lift the circuit board out from the case.

**⚠** Do not place the circuit board on any metal or conductive surfaces.

4. Remove the batteries and replace them with new cells ensuring correct polarity when inserting into the battery holder.

**i** Always replace all three lithium batteries at the same time. Do not mix old and new batteries, and ensure they are from the same manufacturer.

5. Place the circuit board back into the enclosure, place the top cover, and insert hex screws to each side of the case.

## Technical Specifications [↗](#)

Model	UPS-12V/1A
Operating Voltage	18 - 24V DC
Operating Current	Idle: 80mA, Charging: 350mA (max) @ 18V
Output Voltage	9V - 12.6V (On-Battery Backup)   14.5V DC (Input Power Present)
Output Current	1A (max)
Battery Backup Shutdown Voltage	9V
Output Interface	3-wire PowerBus (Output Power + Pixel Device Signature Sense Input)
Battery Type	3.7V 3000mAh Li-Ion 18650 (3 cells)
Battery Charge Time	9 Hours
Battery Runtime	3 Hours @ 1A load
Battery Replacement	3 years
Protection	Over-voltage, Over-Current, Battery Over-Temperature
Mounting	Wall Mount, Din-Rail (Requires additional DIN rail bracket)
Operating Temperature	0 - 50°C
Operating Humidity	90% max RH, non-condensing