

UNINTERRUPTIBLE POWER SUPPLY FOR THE RASPBERRY PI
INTEGRATED AND ADJUSTABLE CHARGING FUNCTION
EXTENDED VOLTAGE RANGE

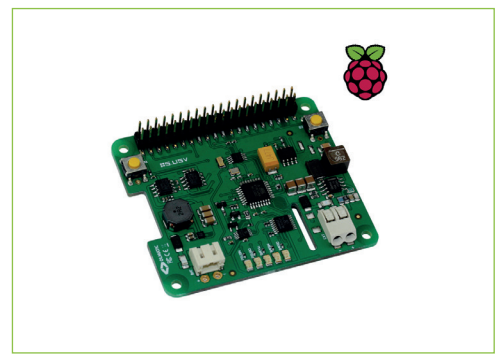
PRODUCT DESCRIPTION

The S.USV pi advanced is an advanced power supply additional module for Raspberry Pi, with the main focus on the uninterruptible power supply of the single-board computer. The module also provides additional functions in order to optimize the operation of the Raspberry Pi by the user. Among other things, this has the ability to adjust the integrated charging current to 300mA (standard), 500mA, or 1 A, causing much faster battery charging time.

The S.USV pi advanced is a fully functional plug & play solution. The power supply occurs directly through the J8 connector on the Raspberry Pi and therefore uses a common voltage source, thus no additional cabling or power supply needed. In addition, the module is equipped with a Li Po battery. An integrated boost switching power converter covers the necessary voltage range, thereby the Raspberry Pi shut down safely in case of misconduct and prevent data loss. The "advanced" version also provides a power input for the extended voltage range of 7 - 24 volts (solar cells, automotive applications, etc.).

To ensure uninterrupted power supply of the Raspberry Pi, the S.USV pi advanced offers a fully integrated monitoring - system with a wide spectrum of operating options. All possible operating states of the Raspberry Pi are monitored internally, so the module is always in a position to respond to misbehavior accordingly. If, for example, the power supply of the single-board computer falls below the adjustable voltage threshold, the S.USV pi advanced automatically switches to battery mode and keeps the functionality of the Raspberry Pi over an by the user adjustable time period constant and bridges the power failure or shut down the single board-computer in case of a long-term power outage securely.

All these features work automatically. In addition, the operator has the opportunity to check and control all operating states or switching operations on a software.



FUNCTION OVERVIEW

- ⊕ HAT compliant UPS Module
- ⊕ Compatible with all Raspberry Pi models
- ⊕ Adapter solution for Pi Model A and B
- ⊕ Uninterruptible power supply
- ⊕ Plug & Play (Power via Raspberry Pi)
- ⊕ Monitoring – System
- ⊕ Intelligent software solution
- ⊕ Built-in LiPo battery (300mAh) with adjustable charging function
- ⊕ Battery Management Controller
- ⊕ Battery Monitoring System
- ⊕ Integrated Real Time Clock
- ⊕ Time-controlled on and off switching of the Raspberry Pi
- ⊕ Raspberry Pi Supply Switch (Power on and off buttons / File safe shutdown)
- ⊕ LED – Status display
- ⊕ Bootloader for Live – Firmware updates
- ⊕ Network input with extended voltage range (7-24V)

TECHNICAL SPECIFICATIONS

	<i>S.USV pi advanced</i>
Plug & Play	√
Power Supply	5 Volts/2500 mA
Extended Voltage Range	7-24 Volts/3500 mA
Secondary output power	5 Volts/3500 mA
Interfaces	I ² C
ID EEPROM	√
Monitoring - System	√
LiPo - Battery	√
Battery Management	√
Battery Monitoring	√
Real Time Clock	√
Raspberry Pi Supply Switch	√
Compatibility	all Raspberry Pi models
Dimensions	65x56,5 mm