

**UNINTERRUPTIBLE POWER SUPPLY FOR THE ASUS TINKER**  
**INTEGRATED AND ADJUSTABLE CHARGING FUNCTION**  
**EXTENDED VOLTAGE RANGE**

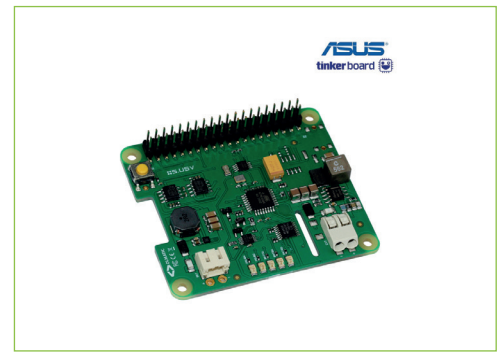
**PRODUCT DESCRIPTION**

The S.USV tinker is an advanced power supply additional module for the Asus tinker board, with the main focus on the uninterrupted power supply of the single-board computer. The module also provides additional functions in order to optimize the operation of the Asus tinker board 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 tinker is a fully functional plug & play solution. The power supply occurs directly through the J8 connector on the Asus tinker board and therefore uses a common voltage source, thus no additional cabling or power supply needed. In addition, the module is equipped with a LiPo battery. An integrated boost switching power converter covers the necessary voltage range, thereby the Asus tinker board shut down safely in case of misconduct and prevent data loss. The S.USV tinker 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 Asus tinker board, the S.USV tinker offers a fully integrated monitoring - system with a wide spectrum of operating options. All possible operating states of the Asus tinker board 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 tinker automatically switches to battery mode and keeps the functionality of the Asus tinker board 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 Asus tinker boards
- ⊕ Uninterruptible power supply
- ⊕ Plug & Play
- ⊕ 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 Asus tinker board
- ⊕ 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 tinker</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 <sup>2</sup> C
ID EEPROM	√
Monitoring - System	√
LiPo - Battery	√
Battery Management	√
Battery Monitoring	√
Real Time Clock	√
Supply Switch	√
Compatibility	All tinker boards
Dimensions	65x56,5 mm