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Product Fact Sheet

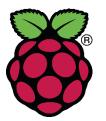
USB Flash Drive for Secure Boot on Raspberry Pi

PU-50n DP Series "Raspberry Edition"

8GB USB 3.1 SuperSpeed, MLC

Date: Revision: July 28, 2021 1.02







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Product Fact Sheet PU-50n DP Series



Product Summary

- Capacities: 8 GBytes
- Form Factor: 24.0 mm x 12.1 mm x 4.5 mm
- Compliance: USB 3.1 Gen 1 SuperSpeed specification compatible (backward compliance with USB 2.0/1.1)
- Performance:

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- \circ Read performance: sequential read up to 100 MBytes/s, random read IOPS up to 2,200
- Write performance: sequential write up to 25 MBytes/s, random write IOPS up to 600
- Operating Temperature Range:
 - Industrial: -40 °C to 85 °C
 - Storage Temperature Range: -40 °C to 85 °C
- Operating Voltage: 5.0 V ± 10%
- Data Retention: 10 years @ life begin; 1 year @ life end

Product Features

- This **USB nano stick** can be used as an **authentication device** for the Swissbit Secure Boot on Raspberry Pi solution (requires also one microSD card PS-45u DP Raspberry Edition)
- The solution is protecting Raspberry Pi boot loader (works with Raspberry Pi 2, 3B+, CM3+ and 4)
- Authentication is performed during the Swissbit customized pre-boot phase to unlock access
- Encrypting user data and boot code with AES 256bit to protect licenses, know-how and IP
- The **boot image can be set as read-only** to prevent unauthorized modification
- Restricting the access to data on the card by various configurable security policies
 - PIN check a PIN entered via keyboard
 - USB check presence of a USB authentication device (requires an Swissbit USB PU-5on "Raspberry Edition").
 - Note: USB policy is currently supported on Raspberry Pi 2, 3B+ and CM3+.
 - NET policy check presence of an authentication server in the network (requires an additional RaspberryPi as a server)

Ordering Information

Product Type	Product Series	Capacity	Part Number	Usage
USB nano	PU-50n DP "Raspberry Edition"	8 GBytes	SFU3008GC1PE2TO-I-GE-020-RP0	Use as authentication dongle in "USB policy"
microSD	PS-45u DP "Raspberry Edition"	8 GBytes	SFSD8192N3PM1TO-I-GE-020-RP0	One microSD card (8GB or 32GB) is required
microSD	PS-45u DP "Raspberry Edition"	32 GBytes	SFSD032GN3PM1T0-I-HG-020-RP0	

SDK & documentation

The SDK and user documentation is available for download under <u>www.swissbit.com/secure-boot-rpi</u>

Why Swissbit?

Swissbit strives to create innovative technologies for future market opportunities utilizing a highly skilled inhouse research and development team. Swissbit maintains a marketing edge by continuing to manufacture world-class high quality memory and security products and providing customers with both high value and low cost of ownership achieved through efficient processes and procedures.

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