



## RU150 | USB 2.0 | USB Flash Drive

SMART's RU150 USB Flash drives provide low power, high capacity mass storage for embedded applications. RU150 USB Flash drives use an injection molding process to fit the smallest form factor requirements. They provide enhanced reliability by incorporating onboard error detection and correction, and static and dynamic wear-leveling algorithms that provide reliable operation over a product's life.

RU150 USB Flash drives are offered with Single-Level Cell (SLC) NAND Flash in capacities of 1GB to 16GB. SLC NAND provides superior durability and reliability over Multi-Level Cell (MLC) NAND technology. The RU150 USB Flash drives are an ideal choice for mission-critical enterprise IT and field service applications.



### Features & Benefits

- SLC NAND Technology
- Zero Seek Time
- Noiseless Operation
- Low Power Dissipation
- Field Upgradeable Firmware via USB Bus
- Small Form Factor

### Applications

- Server Firmware Upgrades
- Specialized Industrial Applications

### Product Family Overview

Form Factor	Capacity	Sequential Performance
USB 2.0	1GB to 16GB	Up to 34MB/s Read Up to 27MB/s Write

## Specifications

RU150   USB 2.0   USB Flash Drive	
NAND Type	SLC
<b>Performance</b>	
Sequential Read (maximum)	34MB/s
Sequential Write (maximum)	27MB/s
<b>Reliability</b>	
Data Retention	10 years > 90% life remaining 1 year < 10% life remaining
Endurance	3 TBW per GB of capacity
Error Correction	Advanced multi-bit error correction
<b>Power</b>	
Vcc	Typical: 5.0 V Maximum: 5.5 V
Read	Typical: 100 mA Maximum: 130 mA
Write	Typical: 100 mA Maximum: 130 mA
Idle	Typical: 50 mA Maximum: 60 mA
<b>Environmental</b>	
Shock/Acceleration	Operating Half-Sine 70 in/sec, 3 shocks along each axis, X, Y, Z, in each direction
Vibration Operating	0.9 g rms, 10-500 Hz, 30 minutes per side (total of 6 sides)
Vibration Non-Operating	Random 13.6 g rms, 10-500 Hz, 30 minutes per side (total of 6 sides)
Operating Temperature	Commercial: 0°C to +70°C
Storage Temperature	-40°C to +85°C
Humidity	5% to 95%, non-condensing, relative humidity
<b>Physical</b>	
Length	54.55 mm
Width	15.49 mm
Height	8.3 mm

## Ordering Information

Part Number	Density
<b>RU150   USB 2.0   USB Flash Drive</b>	
<b>Commercial Operating Temperature (0°C to +70°C)</b>	
SH9MK16GQDU	16GB
SH9MK8GQCU	8GB
SH9MK4GQBU	4GB
SH9MK2GQAU	2GB
SH9MK1GQ9U	1GB



For more information, please visit: [www.smartm.com](http://www.smartm.com)

*\*Product images are for promotional purposes only. Labels may not be representative of the actual product.*

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