Raidon Technology Introduces the iR5740M

Packing four M.2 SATA SSDs and hardware RAID 5 into a standard 3.5-inch HDD footprint

Raidon Technology announces the **iR5740M integrating four M.2 SATA SSDs and built-in hardware RAID 5 into the same dimensions and mounting points as a standard 3.5-inch HDD**, enabling RAID-protected SSD storage in systems where larger drive bays are unavailable.

Designed for industrial and embedded systems, the iR5740M combines high storage density, RAID protection, and front-serviceable maintenance without requiring a separate RAID controller or consuming an additional expansion slot.

It supports RAID 5, RAID 0, BIG, and JBOD through a single SATA III 6Gb/s host connection. Rather than targeting maximum throughput, the iR5740M is optimized for storage density, hardware RAID protection, and serviceability in SATA-based industrial and embedded platforms.



Key Highlights

- Standard 3.5-inch HDD footprint
- 4 × M.2 SATA SSDs
- Built-in hardware RAID 5, RAID 0, BIG, and JBOD
- Single SATA III 6Gb/s host connection
- 2 SATA B+M Key support
- Supports 2230 / 2242 / 2260 / 2280
- Front-accessible, removable, lockable SSD trays
- 20mm active cooling fan
- Drive, temperature, and fan monitoring
- RAIDON STATUSGUARD for Windows
- 2 NVMe / PCIe SSDs are not supported

Why iR5740M?
The iR5740M brings RAID-protected four-SSD storage into systems where 5.25-inch bays, 1U ODD bays, or add-in RAID controllers are not practical.

It is designed for industrial and embedded platforms where SATA remains a preferred interface for long-term deployment, qualification stability, and platform compatibility.

Typical Applications

- Machine vision

- Edge computing
- Factory automation
- Transportation systems
- Data acquisition

RAID Modes

Mode	Description
RAID 5	Capacity efficiency with single-drive fault tolerance
RAID 0	Performance-oriented striped storage
BIG	Combined capacity presented as one volume
JBOD	Independent drive access*

*JBOD access to all four SSDs requires a SATA host controller with Port Multiplier support.

Performance is limited by the SATA III 6Gb/s host interface.

RAID provides drive redundancy but is not a substitute for data backup.

Product Specifications

Specification	Details
Model	iR5740M
Product Type	4-Bay M.2 SATA SSD Hardware RAID Module
Form Factor	Standard 3.5-inch drive bay (3.5-inch HDD footprint)
Mechanical Compatibility	Same dimensions and mounting points as a standard 3.5-inch HDD
Host Interface	1 × SATA III 6Gb/s
Supported Drives	4 × M.2 SATA SSD
Supported SSD Type	M.2 SATA B+M Key
SSD Sizes	2230 / 2242 / 2260 / 2280
NVMe / PCIe Support	No
RAID Modes	RAID 5 / RAID 0 / BIG / JBOD
Power Input	15-pin SATA power
Drive Trays	Front-accessible, removable, lockable
Cooling	20mm fan, High / Low
Monitoring	Drive / temperature / fan status
GUI	RAIDON STATUSGUARD for Windows
Operating Systems	Windows / Linux

Specification	Details
Chassis	Full-metal
Dimensions	101.6 × 146 × 25.6 mm
Weight	Approx. 0.8 kg, excluding SSDs
Certifications	CE / FCC / RoHS
Package Contents	SATA data cable × 1 Tray keys × 4 Accessory kits × 3 Quick Installation Guide × 1