Raidon Technology Introduces IR2026 Dual-Drive Internal RAID-0/1 Module

Supporting 2x2.5-inch SATA 3 (6Gb) SSDs or HDDs in standard 5.25-inch drive bay

[Raidon Technology, Inc](). announces the [IR2026 internal RAID module](**,** a compact, high-performance internal RAID module purpose-built for space-constrained industrial systems.

Designed to fit a standard 5.25-inch drive bay, it transforms a single slot into a dual-drive RAID array supporting 2×2.5-inch SATA 3 (6Gb) SSDs or HDDs, with configurable RAID-0 or 1 for either maximum throughput or mirrored data protection.

Engineered for 24/7 operation in IPCs, servers, and professional workstations, the iR2026 prioritizes uptime and serviceability with front-access drive maintenance, real-time status indicators, and platform-proven reliability. **Advanced safeguards include GUI-based monitoring, key-lock security, silent active cooling, and overheat alarm protection** – hallmarks of the company's trusted 5.25-inch dual-bay RAID architecture.

Space-Saving Design:
Fits 2x2.5" SATA HDD/SSDs (9.5mm or 7mm height) into a single standard 5.25" drive bay.

Hardware RAID Performance:

Selectable **RAID-0** for high-speed striping or **RAID-1** for automated mirroring and data protection.

Optimized Single-Port Connectivity:

Effectively manages 2 drives through a **single SATA 7-pin host connector**. This hardware RAID design saves motherboard ports and reduces cable clutter while sustaining **high throughput over a SATA 3 (6Gb/s) host link** for SSD/HDD workloads.
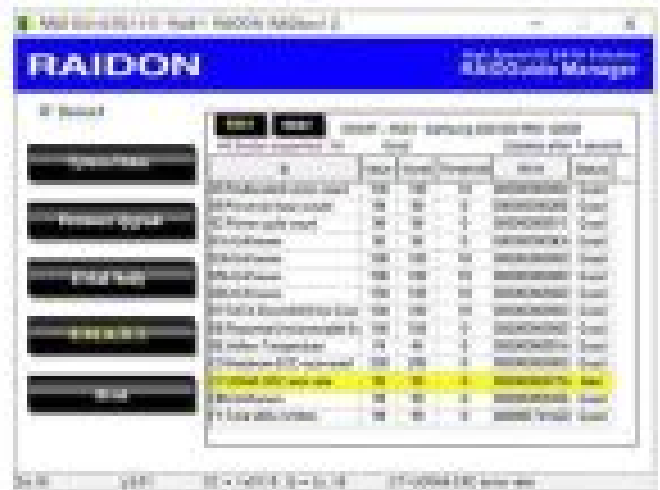
Advanced Monitoring:

LED Indicators

RS232 Port

- **RS232 Port:** Allows custom software integration for drive status monitoring
- **LED Indicators:** Visual status for drive activity and health

Click to enlarge

- **STATUSGUARD GUI:** Dedicated Windows software for real-time drive S.M.A.R.T. monitoring

Reliable Cooling and Durability:

Rugged metal housing with a built-in **40mm silent cooling fan** ensures optimal operating temperatures.

Secure and Easy Maintenance:

Overheat Alarm

Key-Lock Mechanism

- **Hot-Swappable Trays:** Replace drives without powering down the system
- **Key-Lock Mechanism:** Prevents unauthorized physical access to drives
- **Overheat Alarm:** Audible buzzer with a mute button for immediate system warnings

Benefits :

- **Maximized Space Efficiency**
  In industrial and server environments where internal space is at a premium, the iR2026 allows you to double your drive density without requiring additional mounting brackets. Its short depth (**138mm**) ensures compatibility with almost any chassis, including compact IPC cases
- **Business Continuity and Data Security**
  System downtime is costly. By configuring the iR2026 in **RAID-1**, you create an instant real-time backup. If one drive fails, your system continues to run seamlessly, and the hot-swap capability allows you to replace the faulty drive without interruption
- **Industrial-Grade Reliability**
  Built for 24/7 operation, the rugged metal construction and active cooling fan protect your drives from heat and physical stress. The addition of the **RS232 signaling** port makes it a perfect fit for automated factory systems that require remote health monitoring
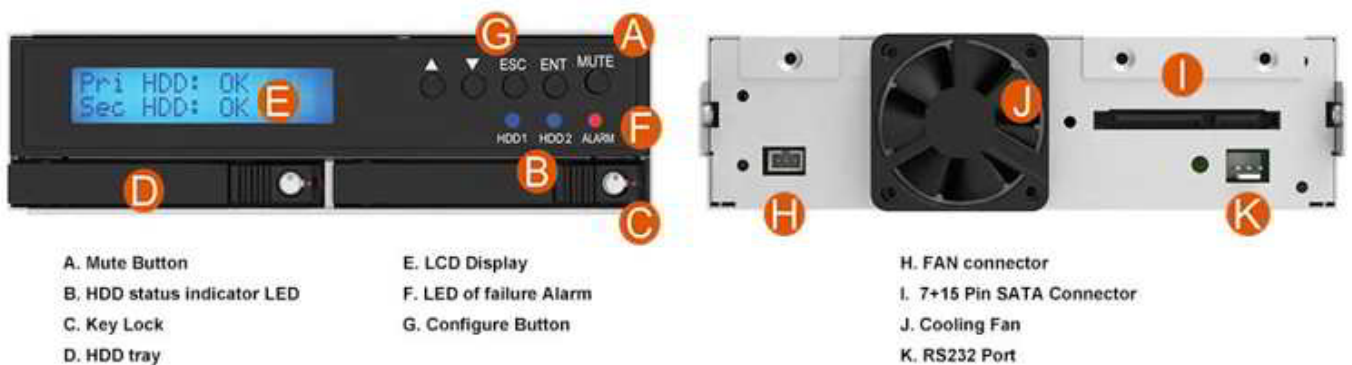
Applications
The iR2026 is versatile but excels in environments requiring durability and data safety:

- **Industrial Automation (IPC):** Ideal for factory floor controllers where vibration resistance and data redundancy are critical. The compact size fits easily into control cabinets
- **Surveillance and DVR:** Use RAID-1 to ensure that critical footage is never lost due to a single drive failure

- **SMB Servers and Workstations:** A perfect boot-drive solution. Run your OS in RAID-1 to ensure the server stays online even if a boot drive crashes
- **Embedded Systems:** The RS232 monitoring capability allows for integration into 'headless' systems where no monitor is attached

A. Mute Button
B. HDD status indicator LED
C. Key Lock
D. HDD tray

E. LCD Display
F. LED of failure Alarm
G. Configure Button

H. FAN connector
I. 7+15 Pin SATA Connector
J. Cooling Fan
K. RS232 Port

Specs:

Model No	iR2026
Interfaces	Host Interface (to system): 1×SATA 3 (6Gb/s) Drive Interface (internal): 2×SATA 3 (6Gb/s)
Compatible Drives	2×2.5″ SATA 3 (6Gb/s) HDD/SSD (Under 9.5mm height)

Storage Level	RAID-1 , 0
System Monitoring	Fan Failure / Overheat
Operating System	Windows, Linux
Function Control Interface	Panel RAID Mode Button Setting
Graphical User Interface (GUI)	Windows Only
Cooling System	4 cm Low noise fan
Dimension and Weight	146(W)x 42(H) x 138 (L) mm
Package Accessories	*iR2026 *SATA Cable *Accessory Kits *Quick installation guide

Resource :
Frequently Asked Questions (FAQ) on iR2026