

# RAID CAPABILITIES

## RECORDING IN MULTIPLE RAID TYPES

RAID (Redundant Array of Independent Disks) is a storage technology used to enhance data performance, availability, and security by combining multiple hard drives into a single unit. This summary outlines key points regarding RAID usage and configuration for certain NVR (Network Video Recorder) models.

Applicable to the following NVRs:

GSD-NVRFNC4K-64NP-N | GSD-NVRFNC4K-256NP

RAID TYPE	HDD QUANTITY
RAID0	≥2
RAID1	2
RAID5	≥3
RAID6	≥4
RAID10	4 or 8

### DATA REDUNDANCY

RAID provides data redundancy, which means that if a disk in the array fails, data remains accessible because it's distributed across multiple drives. This ensures high data availability and minimizes the risk of data loss due to hardware failure.

### FAULT TOLERANCE

Many RAID levels offer fault tolerance, which means that even in the event of a drive failure, the system can continue to function without data loss. This is crucial for mission-critical applications.

### PERFORMANCE LOAD BALANCING

In some RAID levels, data is distributed evenly across drives, which can balance the workload on each drive and optimize system performance.

### AUTOMATION OR MANUAL RAID CREATION

**Automatic RAID Creation:** A one-click configuration quickly creates RAID 5, which requires a minimum of four hard disks with each having a capacity of at least 4 TB. **Manual RAID Creation:** Manually create RAID by specifying a name, selecting the RAID type (0, 1, 5, 6, or 10), choosing hard disks, and formatting the RAID.

### BUSINESS CONTINUITY

For businesses and enterprises, RAID ensures business continuity by reducing the risk of data loss and system downtime, which can be costly in terms of productivity and revenue.

### ENHANCED DATA BACKUP

RAID can be part of a comprehensive backup strategy. Regularly backing up data to a RAID array can provide an additional layer of data protection.

# COMPATIBLE HARD DRIVES



BRAND	HARD DISK MODEL	TYPE	STORAGE CAPACITY	STORAGE TECHNOLOGY	HARD DISK FORMATTING	VIDEO PLAYBACK	FACE LIBRARY IMPORT DATA	LOG SEARCH
WESTERN DIGITAL GOLD	HUS726T6TALE6L4	ENTERPRISE CLASS (RAID)	6T	CMR	✓	✓	✓	✓
	WUS721010ALE6L4		10T	CMR	✓	✓	✓	✓
	WUS721010ALE6L4		22T	CMR	✓	✓	✓	✓
TOSHIBA	MG08ADA800E	ENTERPRISE CLASS (RAID)	12T	CMR	✓	✓	✓	✓
	MG07ACA12TE		14T	CMR	✓	✓	✓	✓
SEAGATE EXOS	ST6000NM019B	ENTERPRISE CLASS (RAID)	6T	CMR	✓	✓	✓	✓
	ST10000NM017B		10T	CMR	✓	✓	✓	✓
	ST14000NM000J		14T	CMR	✓	✓	✓	✓
	ST18000NM000J		18T	CMR	✓	✓	✓	✓

\*\*The RAID function has a high requirement on hard disk performance. To ensure long-term stable operation and reliability of RAID, it is recommended that you use enterprise-class hard disks (installed disks must all be the same, including brand, model, and capacity) for RAID creation and other configurations. Currently, only the 8-bay and 16-bay models support the RAID function. The company shall not be liable for the data loss or data damage caused thereby. Please refer to the terms and conditions of use that can be found on our website.\*\*

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