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.

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

Applicable to the following NVRs:

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

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.

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.