

# ALCON<sup>LINK</sup>™

BE SMART, BE SECURE



**HIGHLIGHTED FEATURES OF ALCON PREMIUM SERIES NVRS**

## FEATURED POINTS

- ❖ **Exclusive Model Of NVRs:**
- ❖ **Latest Compression Technology S+265:**
- ❖ **Automatic Network Replenishment (ANR) Technology:**
- ❖ **Up To RAID(redundant array of independent disks) 60:**
- ❖ **N+1 & N+M Redundancy For Hot Standby:**
- ❖ **1+1 Redundant Power Supply:**
- ❖ **HDD Hot Swap:**
- ❖ **Video Analytics(VCA):**

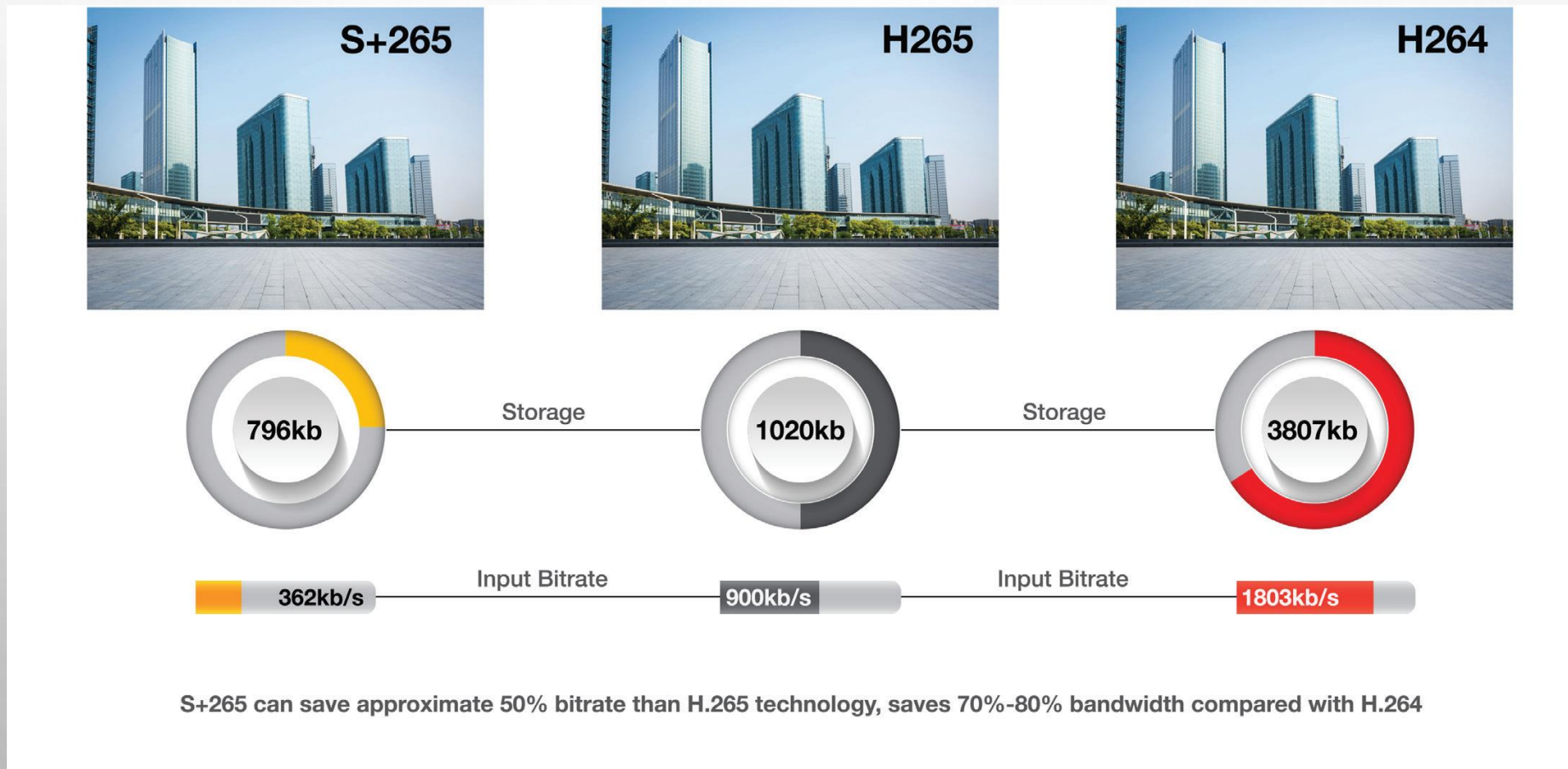
## FEATURES DESCRIPTION

❖ **Exclusive Models Of NVRs:** Alcon's have some exclusive models of NVRs which SI partners can implement in their projects to prevent other brands of IP surveillance product. NVR models are like 10CH 1SATA(AL-NVR5010-1D), 20CH 2SATA(AL-NVR5020-2D), 25CH 2SATA(AL-NVR5025-2DL), 36CH 2SATA(AL-NVR5036-2DL), 40CH 4SATA(AL-NVR5040-4D), 40CH 4SATA RAID(AL-NVR5040-4DRAID), 80CH 8SATA RAID(AL-NVR5080-8DRAID), 80CH 16SATA RAID(AL-NVR5080-16DRAID), 160CH 24SATA RAID(AL-NVR5160-24DRAID) & 320CH 24SATA RAID(AL-NVR5320-24DRAID) etc. Also we have versatile managed control room solution up to 2000CH in a single platform using Alcon's K2000 server.

❖ **Latest Compression Technology S+265:** Its an innovative feature specially introduced by Alcon that can greatly trim 50% bitrate of video which is based on latest standard compression H.265. Alcon's S+265 technology is highly improved video compression technology related to H.265 or (HEVC)High efficiency Video Coding. Using S+265 technology, experiencing video quality parallelly reaches up to H.265/HEVC technology. It also reduces the communication bandwidth and storage size required in NVR, VMS, NAS & other storage devices. Its an one click solution for: Bandwidth trimming, storage flexibility, Encoding mode, I-Frame interval & SVC(Smooth Video Coding). Its tested & magnificently developed in bandwidth trimming, storage requirement & smooth video coding(SVC).

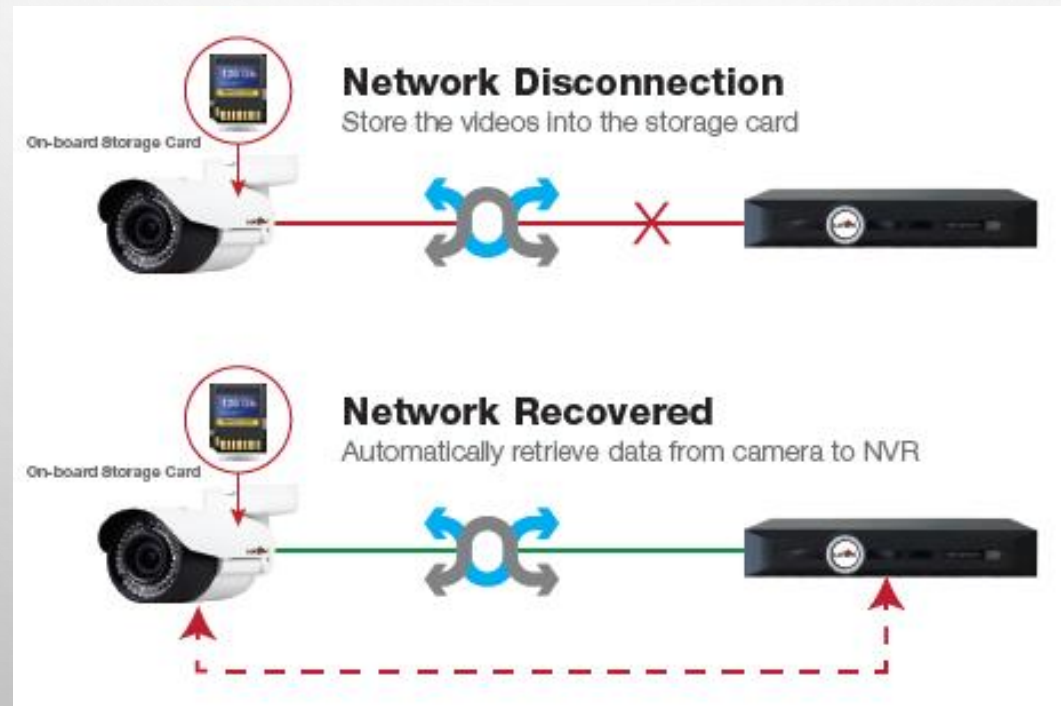
- **Benefits of S+265:** Present IP surveillance industry is growing with ultra HD IP surveillance cameras & its required high transition bandwidth with huge storage space using H.264/H.265. But, Alcon's have intelligent S+265 compression technology which can overcome this huge bandwidth & storage requirement.

## Bandwidth and disk space example





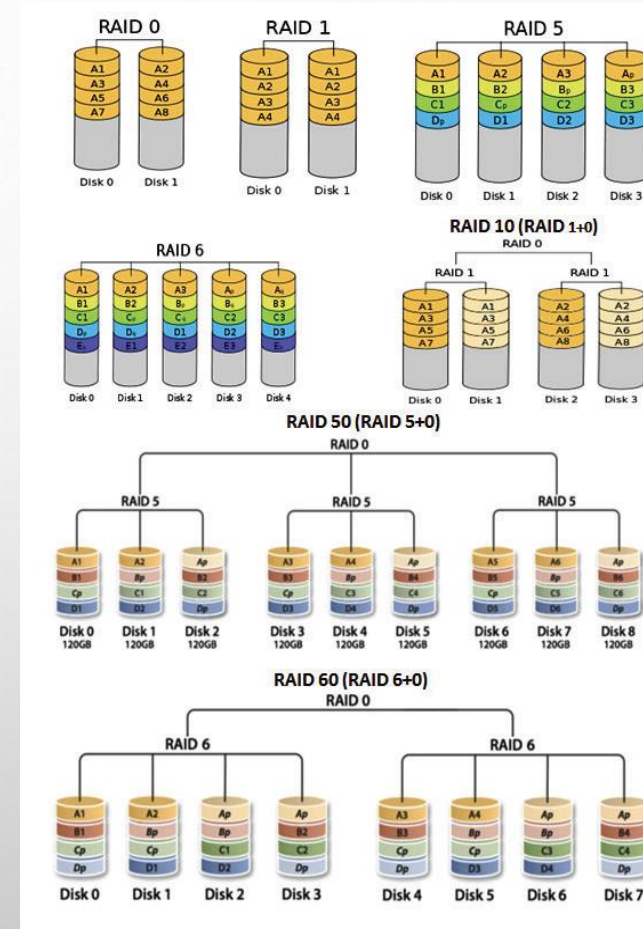
❖ **ANR(Automatic Network Replenishment) Technology:** NVRs(Network Video Recorders) with the ANR(Automatic Network Replenishment) function can automatically store video data on local SD card in IPC(Internet Protocol Camera) when the network is disconnected. After recovery of the network, the NVR automatically retrieves the video data which is stored on the camera's local SD card. It also remove stored data from SD card, after replenishment of data in NVR. Alcon's have the same feature on advanced level, it is configurable by two different ways: **1.** If users enable ANR function only from NVR end, it will start recording in camera's local SD card & it will not transfer any data to NVR after network recovery. **2.** If users enable ANR function from camera & NVR both end, it will start recording in camera's local SD Card on network disconnection & the camera will transfer the same data to NVR on network retrieval. Also it will remove Transferred from camera's SD card.



## ❖ Up To RAID(redundant array of independent disks) 60: RAID (Redundant Array of Independent Disks )

Originally Redundant Array of Inexpensive Disks) is a data storage virtualization technology that combines multiple physical disk drive components into one or more logical units for the purposes of data redundancy, performance improvement, or both. Alcon premium series RAID enabled NVRs are coming with 6 different RAID levels JBOD, RAID 0, RAID 1, RAID 5, RAID 6, RAID 10, RAID 50, RAID 60(>0°C, Each Raid Group Supports up to 100Mbps Input).

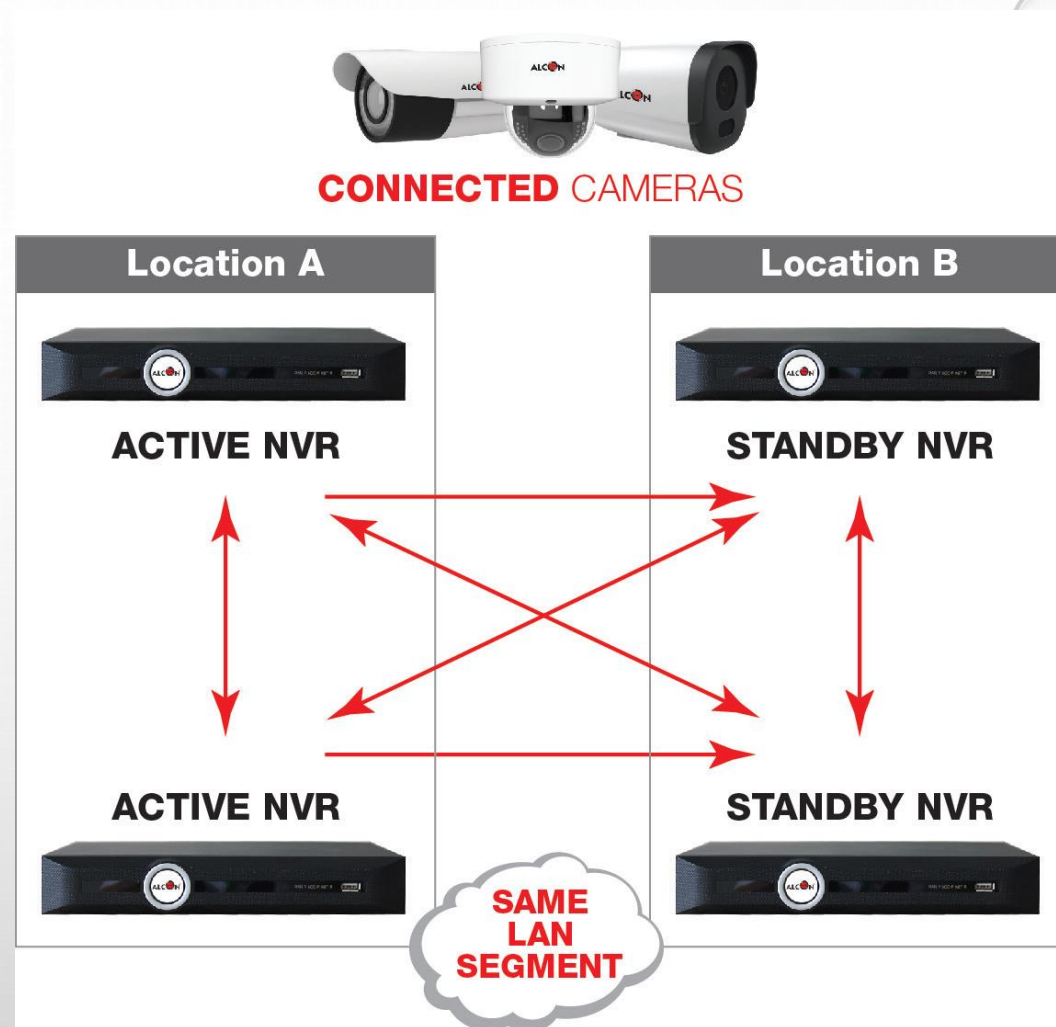
- **JBOD**(Just a Bunch Of Disks) means that your data is on single, stand-alone hard drives. If a one of your JBOD disks fails, the data on that disk is probably lost.
- **RAID 0** – Striping it can perform higher than the single-disk.
- **RAID 1** – Mirrored pair contains two disks.
- **RAID 5** – Striping with parity RAID 5 requires at least three disks.
- **RAID 6** – Striping with double parity it requires minimum four disks.
- **RAID 10** – Combining mirroring and striping, it requires a minimum of four drives.
- **RAID 50** – RAID 50, also called RAID 5+0, combines the straight block-level striping of RAID 0 with the distributed parity of RAID 5. As a RAID 0 array striped across RAID 5 elements, minimal RAID 50 configuration requires six drives.
- **RAID 60** – RAID 60, also called RAID 6+0, combines the straight block-level striping of RAID 0 with the distributed double parity of RAID 6, resulting in a RAID 0 array striped across RAID 6 elements. It requires at least eight disks.



## ❖ N+1 & N+M Redundancy For Hot Standby:

**N+1** — Provides a single extra node that is brought online to take over the role of the node that has failed. In the case of heterogeneous software configuration on each primary node, the extra node must be universally capable of assuming any of the roles of the primary nodes it is responsible for. This normally refers to clusters that have multiple services running simultaneously; in the single service case, this degenerates to active/passive.

**N+M** — In cases where a single cluster is managing many services, having only one dedicated failover node might not offer sufficient redundancy. In such cases, more than one (M) standby NVRs are included and available. The number of standby servers is a tradeoff between cost and reliability requirements.





### ❖ 1+1 Dual Power Supply:

Found more commonly in servers and other high-end computers, dual **power supply** contains two **power supply** units inside it. Each **power supply** is capable of powering the entire NVR and only one runs at a time. If one fails, the other **power supply** starts running to keep the NVR powered up with zero down time. Now the same technology is available in Alcon's high-end NVRs.



### ❖ HDD Hot Swap:

In electronics technicalities, the term "hot" is often used to mean "live"/ "powered on." Therefore, a hot swappable HDD is a peripheral or component that can be removed or added while a NVR is running. Replacing a HDD while a NVR is powered on, it is called "hot swapping." A well-known example of this hot swap functionality is the Universal Serial Bus (USB) that allows users to add or remove peripheral components such as a mouse, keyboard, printer, or portable hard drive; depending upon the supplier such devices are characterized as hot-swappable or hot-pluggable.

Hot swapping is used whenever it is desirable to change the configuration or repair a working system without interrupting its operation. It may simply be for convenience of avoiding the delay and nuisance of shutting down and then restarting complex equipment or because it is essential for equipment, such as a server, to be continuously active.



## ❖ Video content analysis(VCA):

Alcon premium series NVRs are fully compatible with Alcon's premium series cameras which supports some innovative inbuilt VCA(Video content analysis) features like :Tripwire/Double Tripwire/Perimeter/Object Abandon/Object Lost/Running/Loitering/ Parking/Early Warning/Crowd/Face Detection/People Counting/Audio Abnormal Detection/Video Abnormal Detection/On duty Detection/intelligent tracking/Heat map.

Video analytics features was created to help review the growing hours of surveillance video that a security guard or system manager may never have time to watch - your video surveillance system is only as useful as the incidents you can actually capture and watch, and video analytics will help you find them. Using video analytics makes your surveillance system more efficient, reduces the workload on security and management staff, and helps you capture the full value of security video by making your IP camera system more intelligent in its work.





# Thanking You

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