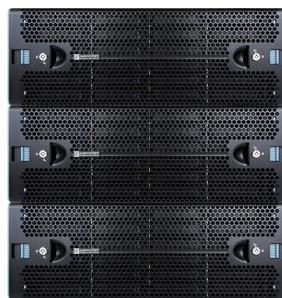*wavestore*
Innovation with integrity

PetaBlok®

Wavestore PetaBlok NVRs deliver an unmatched enterprise recording, management and control solution for projects that require robust long-term storage and demand mission-critical reliability.

Up to 254 network cameras can be connected to each PetaBlok, which are supplied with pre-installed Wavestore's Video Management Software (VMS). Throughput options up to 2,400Mbits/sec are available, with multiple network interfaces to segregate incoming and outgoing network traffic. Ports can be bonded to provide fault-tolerance and maintain the highest levels of performance at all times.

PetaBlok NVRs come complete with dual power supply as standard and can accommodate up to 204 x 3.5" hot swappable hard drives in a high-density chassis to provide up to 2.04PB of storage per unit. This can deliver more than 400 days continuous real-time recording from 254 HD cameras or more than 100 days recording from 254 4K cameras, each with RAID5 redundancy**.

Up to 520.2PB storage in a single solution

Multiple PetaBlok NVRs, as well as other Wavestore NVRs and HVRs, can be configured into a server group of up to 255 units* to satisfy large and distributed installations via a single Graphical User Interface (GUI). This provides up to 520.2PB of storage for over 64,700 IP channels across a single solution.

Choose your Wavestore VMS channel license level

PetaBlok NVRs are compatible with all four levels of Wavestore's VMS: Base, Premium, Enterprise and Ultimate, which offer a broad range of capabilities and features to ensure the right solution for any given application.

Failover

PetaBlok NVRs are failover ready and can be used to protect your live viewing, recorded data and configuration in the event of hardware failure on a primary NVR. Should this occur, the failover server will automatically take the place of the primary NVR by applying the same configuration and continuing to display and record video, all without any operator intervention. Failover is available at Wavestore VMS Enterprise channel license level and above.

HyperRAID™ redundancy and EcoStore™ energy saving

PetaBlok NVRs are compatible with Wavestore's HyperRAID™ technology as standard, providing options of RAID5/RAID6 (N+1/N+2) at Wavestore VMS Premium or Enterprise channel license levels, or up to an industry leading N+5 at Ultimate channel license level. EcoStore™ is also provided

at Enterprise channel license level and above, which can save over 80% of HDD energy by spinning down drives not in a read or write state.

Warranty

All PetaBlok NVRs are supplied with a full three-year return to base hardware warranty, extendable to five-years.

Pre-installed with Wavestore Video Management Software (VMS)

Whether you are looking for a video only application using a mix of camera technologies, including 360° fisheye and 4K, or a fully integrated solution with third-party providers for Access Control, Video Analytics, Intruder Detection and more, it is possible to create best-in-breed total security solutions that meet exacting specifications for the end-customer with Wavestore's ONVIF conformant truly open-platform VMS.

Coupled with a flexible and cost-effective license model, additional cameras or functionality can easily be added at a later date without disruption to the existing system. What's more, there's no recurring support contracts to sign up to and technical support is free of charge.

Wavestore's WaveView and WaveView Mobile clients

WaveView is Wavestore's free of cost client software, which delivers an intuitive interface designed to offer full, yet simple, control of total security solutions. Authorised WaveView client devices can simply access individual or grouped Wavestore NVRs to give users full control of their security system.

The WaveView Mobile application adds mobile viewing capability enabling operators to view and control their system from iOS or Android devices.

WaveView's leading search and playback capabilities allow operators to quickly review recorded images via an intuitive play bar, providing instantaneous access to exactly the right image from any point in time from the recorded data, even over large amounts of stored data.

Export of video evidence

In just three mouse clicks, operators can export clips from multiple cameras simultaneously to a variety of file formats or create a storyboard of events with a sequence of cameras, including virtual PTZ control of 360° fisheye cameras. Authentication and encryption of video and audio content are also supported.

At a glance

Camera channels
Up to 254 IP

Hard drives
Up to 204 x 3.5"

Storage capacity
Up to 2.04PB

IP throughput
Up to 2,400Mbits/s

PSU
Dual PSU as standard

Failover ready*

HyperRAID™ ready (up to N+5 redundancy)*

EcoStore™ HDD spin-down ready*

Key Features

- Highly secure VMS embedded into the Linux Operating System (OS)
- Up to 4096bit encryption with comprehensive cyber-security package provided as standard
- Fully ONVIF conformant and truly open-platform
- Compatible with the world's leading camera brands and video formats
- Compatible with a wide range of camera technology including UHD, 4K, HD, 360° fisheye, panoramic, thermal, HD over analogue and analogue
- Comprehensive third-party integration capability across Intelligent Video Analytics, Access Control, Intruder Detection and other technologies*
- Five-year warranty with global next day on-site support, provided by Dell
- Optional four-hour on-site support for mission critical installations

* These features are available from the NVR/HVR but are dependent on the Wavestore VMS channel license level to operate. Please check specifications prior to ordering.

** Typical expected figures; please make sure the calculations for your specific camera and site requirements are completed before ordering.

TECHNICAL SPECIFICATION	WR218
Channels & throughput	
Max. IP channels	254
Max. audio channels	254
Max. built-in analogue channels	-
Max. IP throughput	1,200Mbits/sec (standard) 1,800Mbits/sec (option) 2,400Mbits/sec (option)
Compression formats	H.265, H.264, MJPEG, MPEG-4, MxPEG and JPEG2000
Typical video storage rate	1600 FPS
Operation	
Operating system	Linux (VMS embedded)
Operating system drive	64GB SATA DOM
CPU	Intel Xeon E3-1220v6
RAM	8GB DDR4 ECC
Graphics card	On-board
Connectivity	
Network interfaces	4 x Gb NIC (standard) 6 x Gb NIC (option) 8 x Gb NIC (option)
USB ports	2 x USB 2.0 2 x USB 3.0
Monitor outputs	VGA
Alarm I/O module	Optional
Keyboard and mouse	Yes (not supplied)
Wavestore VMS	
Pre-installed with Wavestore's VMS	Yes
Wavestore VMS channel license compatibility	All levels
VMS configuration restore points	Yes
Multicast support	Yes
Automatic camera discovery and camera group set-up	Yes
WaveView Client	
Local client use	Setup only
Remote client use	Yes
WaveView Mobile compatible	Yes

TECHNICAL SPECIFICATION	WR218
Storage and Hard Drives (HDDs)	
Max. number of HDDs	240
Min. internal storage	200TB
Max. internal storage	2.04PB
HDD type	Surveillance grade (standard) Enterprise grade (option)
Hot swap HDD bays	Yes
EcoStore™ HDD spin-down compatible*	Yes
Redundancy	
RAID*	HyperRAID (RAID5/6, N+1/2) HyperRAID Plus (up to N+5)
Dual PSU	Yes
Failover compatible*	Yes
Physical	
Form factor	8U rackmount (48 bays) 8U rackmount (84 bays) 12U rackmount (108 bays) 12U rackmount (144 bays) 16U rackmount (168 bays) 16U rackmount (204 bays)
Dimensions (D x W x H)	24 bay master: 575 x 483 x 178 24 bay expander: 575 x 483 x 178 60 bay expander: 767 x 483 x 178
Weight (with 1 HDD fitted)	24 bay master: 20.2Kg 24 bay expander: 19.1Kg 60 bay expander: 45.1Kg
Weight (each additional HDD)	Approx. 750g
Operating temperature range	5°C to 40°C 41°F to 104°F
Operating relative humidity (non-condensing)	20% - 80%
Power	
Power input	100-240v AC 50/60Hz
Power consumption with 1HDD	24 bay master: 100W typical 24 bay expander: 90W typical 60 bay expander: 200W typical
Power consumption (each additional HDD)	24 bay expander: 90W typical 60 bay expander: 200W typical
Warranty	
Standard warranty	3-year return to base
Extended warranty	Up to 5-years

Rear Panel Connections:

- VGA monitor connection (for set-up only)
- Network interface Ports 0,1,2,3
- 2 x 3.0 USB ports
- 2 x 2.0 USB ports
- Dual mains input

Build your Petablock NVR:

Series	Form Factor	Max No. of HDDs	Storage fitted (TB)	Drive type fitted	No. of HDDs fitted	RAID ports	No. of NICs	Analogue channels	Power supply	CPU options	Graphics options
Z	8 (8U) 12 (12U) 16 (16U)	204	From 200TB to 2.04PB	PU (Surveillance grade) GD (Enterprise grade)	25 to 204	HR (HyperRAID ready)	4G (4) 6G (6) 8G (8)	NA (none)	D (dual)	1 (standard)	1 (standard)

Channel licenses sold separately