KT&C INNOVATIVE
HIGH DEFINITION SURVEILLANCE

OMNI-IP
Scalable IP Solutions

PLUG & PLAY IP

VIDEO, POWER
ALARMS, SOFTWARE

Key Features

- Connect up to 4 IP cameras in any combination with no special licenses required
  - 'Hands Free' Plug-and-Play cameras on the 4 built-in PoE ports
  - Onvif or other supported IP cameras* (*See list of manufacturers/models)
  - Power cameras with up to 15W each (802.3af PoE) from a total of 50W built in PoE power
- Stream an aggregate bandwidth to the NVR of up to 20Mb/s from all connected cameras
  - Select camera resolutions up to 5MP
  - Set lower resolution/rate/image quality to meet application/installation requirements
- Local HDMI/VGA monitor displays at up to 1920x1080
- Employ digital zoom in both live view and playback for expanded view of fine details
- Record based on schedule, motion, event/alarm, combinations, VCA, or None
- Easy to use on-screen menus include digital zoom and instant playback of recent video
  - Operate using front panel controls, wheel mouse or optional IR remote
- Quickly locate and review event video
  - Search by date/time, or preview images by pointing along a color coded timeline of record type
  - Play based on results of extensive event/alarm log search
  - Use "Smart Search" to define an area of interest; the NVR quickly reviews recorded video to list instances of motion in that area for review by the operator
  - Use Video Content Analysis event detection on all channels
    - Line crossing (with direction) up to four lines
    - Area intrusion (with loitering time) up to four areas
    - Rapid fast forward can scan quickly between VCA events, yet plays events at normal speed
- Optional arming schedule for action/notifications and alarms (e.g. ignore on-camera motion from specific cameras during normal business hours)
- View, record and play main stream for detail, or sub-stream to conserve bandwidth and CPU resources

- Easy to use on-screen controls including zoom and instant playback of recent video
- System automatically conserves resources by selecting sub-stream during multiple camera viewing
- User selectable viewing optimization for image detail of fluency of motion
- Choose up to 12Tb of internal HDD storage (optional mirroring), or record to external NAS/SAN
- Easy remote access: view NVR over Internet without programming router: built-in uPnP router NAT/ port mapping forwards ports automatically (*Router must support/permit uPnP function)
- Your choice of IE, Chrome, Firefox or Safari browsers to view live or playback video, or to manage NVR
- Unique virtual host provides menu based features and capabilities
- View multiple live/playback video streams on Android/iOS apps, or get HD viewing from tablet specific app
- Free Windows and MAC CMS Client for up to 64 live/4 playback views, manage and back up multiple sites
- Two way audio support (compatible camera required) from NVR, web screens and CMS
- Rack mountable 1U chassis (optional rack ears: KA-ORM1)

KNR-p4Px4
4 Channel Plug & Play NVR

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Plug & Play	PoE	up to **5** Megapixel	**30** FPS	Front Panel Controls
HDMI 1080p	VGA Main Monitor	E-MAIL NOTIFICATION	NAS SAN	uPnP Router Setup
ONVIF	Remote Preview	Sub-Stream	**2** WAY AUDIO	Mirror Recording
Remote Backup	Digital Zoom	Smart Search	Arming Schedule	Bandwidth Optimization
FREE App IOS/Android	FREE CMS	MAC Client	E-MAIL NOTIFICATION	

PLUG & PLAY IP
VIDEO, POWER, ALARMS
CAMERA CONTROL

4 PLUG & PLAY PORTS

Streaming Video Inputs & Recording

Maximum Number of IP Cameras	4
Number of built in PnP/PoE Switch Ports	4
Supported Live View/ Record Resolutions	5MP / 3MP / 1080P / UXGA / 720P / VGA / 4CIF / DCIF / 2CIF / CIF / QCIF
Sub-stream	Supported for recording, playback and live viewing
Audio streaming	Supported from audio capable cameras
Maximum FPS rate per camera	30FPS Main stream; 30FPS Sub-stream
(Live and Record)	Up to 120FPS total for 4 cameras
Maximum Record Streaming Video Input Bandwidth (all cameras combined)	20 Mb/s
Recording Compression	Depends on IP Camera; typically H.264 for main stream, MJPEG for sub-stream
Recording Modes	Continuous, Motion, Alarm, Motion+Alarm, Motion, Alarm, VCA, None
Motion & VCA Detection	Camera Side, configurable from NVR for KNC-p3 Omni IP Series Cameras
Schedule Period	Per day in 1 hour blocks; or 8 time periods per day, each with different record mode; plus holidays
Pre- and Post- Event Recording	Pre-record 0~30 seconds; post record 5s~10 minutes
Built in network switch port speed	10/100 Mb/s each port
KT&C Omni-IP 'hands free Plug and Play' Cameras Fully Supported	KNC-p3BR4IR, KNC-p3BR6IR, KNC-p3BR12IR, KNC-p3DR4IR, KNC-p3DR3IR, KNC-p3DR6IR, KNC-p3DR12IR, KNC-p3BR4XIR, KNC-p3BR6XIR, KNC-p3BR12XIR, KNC-p3TR4XIR, KNC-p3TR3XIR, KNC-p3TR6XIR, KNC-p3LR4IR, KNC-p3LR3IR, KNC-p3LR6IR, KNC-p3BR28V12IR, KNC-p3DR28V12IR
Third Party Cameras Supported (requires traditional configuration and setup)	Onvif; Acti, Arecont, Axis, Bosch, Brickcom, Canon, Hikvision, Hunt, Panasonic, Pelco, Samsung, Sanyo, Sony, Vivotek, Zavio

Local Live Presentation of Streaming Video/Audio

Local Display Main Monitor Outputs HDMI	HDMI 60Hz: 1920×1080, 1600×1200, 1280×1024, 1280×720, 1024×768
Local Display Main Monitor Outputs VGA	VGA 60Hz: 1920×1080P, 1600×1200, 1280×1024, 1280×720, 1024×768
Camera Display Layouts	1, 2x2
Automatic Stream Selection	Single camera view and 720p 2x2 at main stream resolution; Automatic switching to sub-stream resolution in other multi-view displays to conserve CPU capacity and maintain parity between per-camera screen area and image size
Audio Output (requires audio equipped cameras)	1-ch Line Level, RCA (Linear, 600Ω)

Playback of Recorded Video/Audio

Supported Playback Resolutions	5MP / 3MP / 1080P / UXGA / 720P / VGA / 4CIF / DCIF / 2CIF / CIF / QCIF
Local Display Playback Maximum Video Bandwidth (all cameras combined)	~8Mb/s nominal
Nominal Local Playback Capability	4 channels 720p; 2 channels 1080p; 1 channel 5Mpix (actual playback depends on decoding load which varies based on settings for recorded video bandwidth restrictions, resolution, image quality, FPS rate, compression efficiency, and complexity of pixel change in the scene)
Playback search modes	Time/Date; Event (Alarm, Motion, VCA); Manual Tags; Smart Search for motion events from recorded video
Playback Controls	Play; Pause; Forward/Reverse; speed control for single~1/8~4X; Slide bar with overview of record type and snapshot display from slider position
Digital Zoom During Playback	Supported on Local Displays and CMS

Local Hard Drives and Other Storage

Number of Internal Hard Drives	Up to 2 SATA HDD; up to 6TB each for 12TB maximum
Mirror Recording	Can clone pairs of disks
S.M.A.R.T	With extensive statistics, alarms, on demand tests and reporting
Record to	HDD, NAS or SAN
Archive to	USB

Local Plug and Play Camera Network Support

Integral PoE Switch	4 ports 10/100 Mb/s
Camera Network Security	Camera network is isolated from LAN/WAN port
PoE Type	802.3af 15W max per port

Total Power Budget	50W all ports
PnP Network Support (Using KT&C KNC-p3 Omni-IP Series cameras connected to internal PnP PoE switch ports)	Integral DHCP function with address-per-port initial assignment

Remote Viewing and Local/Remote Configuration

Built in Web Server Interface	Live view, playback and configuration via IE, Chrome, Firefox, Safari (with free plug-in/extension installed)
CMS	PC and MAC Client supports multiple device viewing, playback (with digital zoom) and configuration; user rights per camera; E-map support; live view up to 64 cameras in 4:3 and 48 cameras in 16:9; up to 4 cameras in playback
Mobile Apps	iOS and Android supported; live 16 camera views; 4 camera playback; snapshots from live or play; copy clips/record to smartphone; audio support; PTZ control. HD version of app, optimized for tablets, is available
User Rights Control	Per user-per camera for multiple functions
Event Logging	Multiple types: alarm, exception, operation, information; dozens of sub-types within each major type
Firmware Upgrade	From USB or remotely
Backup/Restore Configuration	For NVR settings and for IP Camera settings; from USB or remotely

Network and Other Interfaces

LAN/WAN Network Port	One 10/100/1000Mb/s RJ-45 port
Connection of non-PnP IP cameras	Supported
Remote Monitoring Output Maximum Bandwidth	40Mb/s
Maximum number of remote connections	128
DST/NTP	Supported; choice of time zone, NTP server, DST start/end/offset
Port Mapping/uPnP	Automatic port forwarding/redirection using uPnP on routers with this capability
Serial Interfaces	1xRS-485
USB 2.0 Interfaces	Two: 1 front; 1 rear
Audio Input	1 RCA

General Mechanical and Environmental

Power Input	100~240VAC, 47~63Hz
Continuous Power Consumption	67W including PoE
Operating Temperature	14°F ~ 131°F (-10°C ~ +55°C)
Operating Humidity Range	10% ~ 90%
Cooling Fan	1, in power supply
Size	17.52" x 11.42" x 1.77" (445mm x 290mm x 45mm) Rack Mountable with optional KA-ORM1 brackets
Weight (without hard drives or ODD)	5.51b (2.5Kg) allow ~1.4 lb. per HDD
Certifications	FCC, CE, RoHS

www.ktncusa.com

Ordering Information