

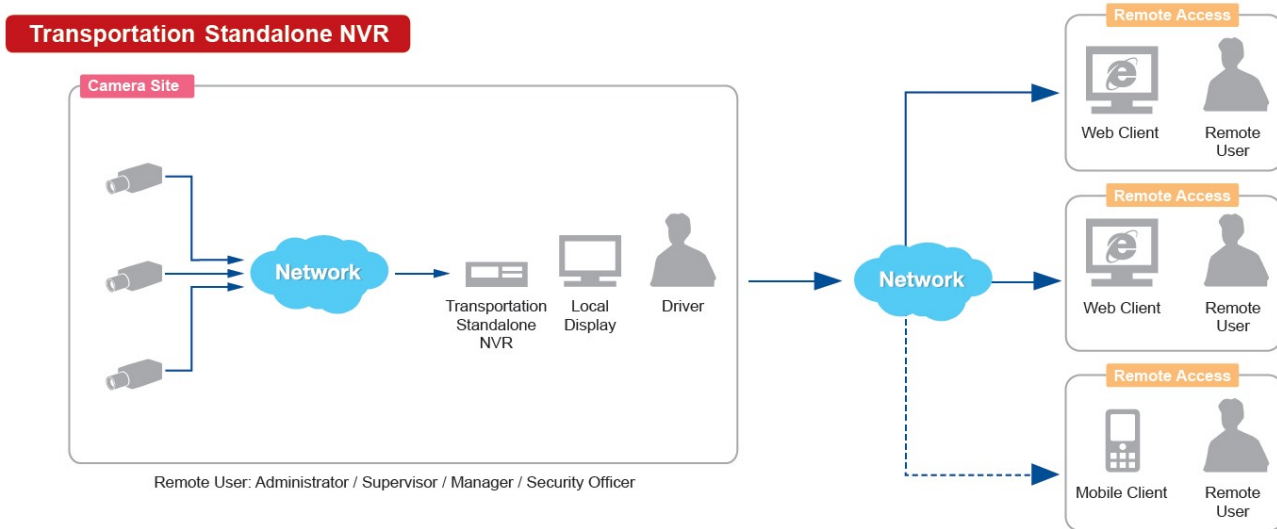
# MNR-320P

## 16-Channel Transportation Standalone NVR with 4-port PoE Connectors



- Built-in PoE Connectors (4 ports)
- Workstation, Web Client, Mobile Client
- Event trigger, response and notification
- Video export formats: RAW, AVI, EXE

### ► Solution Diagram



### ► Specifications

#### Device

Product Type	Standalone NVR
Maximum Resolution	Support all ACTi cameras in all resolutions

Maximum Number of Video Devices	16
Maximum Number of POS devices	16 (requires additional license)
Maximum Number of Access Control and Network I/O devices	16 (requires additional license)
Maximum Number of Clients	Local: 1, Remote: 3

**Hardware**

CPU	Intel Atom E3845
RAM	4GB

**License**

Free License	16 (16 channels for ACTi and 1 channel for third-party video device)
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**Live View**

Display Layout Mode	Local:1, 3, 4, 5, 6, 8, 9, 10, 12, 16 Remote:1, 3, 4, 5, 6, 8, 9, 10, 12, 16, 18, 24, 25, 35, 36, 48, 49, 64, Custom
Fisheye Dewarping	Yes
Local Live View performance	Please check "Standalone NVR Performance Validator" ( <a href="http://www.acti.com/SANVRPerformance">http://www.acti.com/SANVRPerformance</a> )
Digital Zoom	Yes
Event Status	Display event status upon alarm or upon connection loss or recovery between server and client or when the allocated disk space is full
Instant Playback	Instant Playback in live view window
Embedded websites in Live View	Display and connect to pre-configured embedded website

**Map**

e-Map	Yes
Layout	Area maps with camera icons, small live view windows, hyperlinked
Setup	e-Map image upload, Google maps settings and preset management, camera positioning, vision angle and pointed direction of camera, view positioning, source positioning, extended devices for Point-of-sale (POS), Access Control, Network I/O, Car Park
PTZ Mode	Mouse PTZ mode to control e-Map video streams

**PTZ**

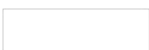
PTZ Control	PTZ Control, Speed Control, 32 preset points
Joystick	USB based joystick supported

**Video**

Compression	H.265, H.264, MPEG-4, MJPEG
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**Audio**

Audio Type	2-way, Mic-in, Line-in, Line-out
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**Network**

Network Protocol & Service	IPv4/v6, TCP, UDP, DHCP Client, HTTP, DNS, NTP, RTP, RTSP, SMTP, FTP, ICMP, ARP, UPnP, LDAP (client)
Ethernet Port	Total ports: 6 port(s) (WAN) Non-PoE: 2 port(s), Ethernet (1000 Base-T), RJ-45 connector (LAN) PoE: 4 port(s), Ethernet (10/100 Base-T), RJ-45 connector

**Recording**

Scheduled Recording	Yes
Event Recording	Yes
Manual Recording	Yes
Event Speed-up Recording	Yes
Dual Stream Management	Yes
Maximum Recording Throughput	192 Mbps

**Search & Playback**

Playback Control	Continuous forward and backward playback with speeds 1x/2x/4x/8x/16x or frame-by-frame, pause, stop
Synchronized Playback	4 channels (Local), 16 channels (Remote)
Recording Search	Search video recordings by time, events, channels, bookmarks, notifications and listed as clickable time-based thumbnails for full-size view and snapshot download
Smart Search	Smart search of recorded video by Motion Detection and Tamper
Video Export	RAW, AVI, EXE

**Event**

Event Trigger	[NVR]: Disk full, Disk not found, Disk is available, Schedule service start and stop, Video Push start and stop, CPU limit exceeded, [Video Device]: Video motion detection, Passive IR sensor, External device through digital input, Sound detection, Intelligent event detection, Video Push start and stop, Video loss, Video Recovery, Network loss and recovery, [Extended Device]: Point-of-sale (POS) status, Network I/O status, Access Control status, Car park status
Event Response	Pop-up window with live video and event confirmation activation, Switch to hotspot window, Switch to customize view, Command a PTZ device to go to a preset point, Play alert sound, Activate external device through digital output, Execute system command to activate other programs, Upload video or snapshot to FTP server, E-mail notification with snapshots, Push notification

**Redundancy Server**

Redundancy Service	Yes, N+1 (With limited functions when NVR 3 server acts as Redundancy server)
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**System**

Permission control	Unlimited number of users, Active Directory, Customizable permissions for user groups, Account lockout, Automatic logout after idle, Playback password protected, Password validity period
Watchdog	Support
Client PC Operating System	Windows 7 SP1, Windows 8.1, Windows 10, Windows Server 2008 R2 SP1, Windows Server 2012 R2, Windows Server 2016, Windows Server 2019
Server and Client PC requirements	Please use <a href="https://www.acti.com/pcselector">https://www.acti.com/pcselector</a> For client PC requirements, please check the Performance: Live View section.

Server Operating System	Windows 7 Embedded
Mobile Client Program	Mobile device application (ACTi Mobile Client) supports Live View, PTZ Control, Video Push, Event/time based search and playback, Supported device(s) iPhone, Android device
USB	4-Port USB 2.0
Language	Multi-Language

## Integration

Unified Solution	Fully compatible with ACTi cameras, encoders, central management system, TV wall and intelligent video surveillance software
GPS Position	Manual setting
ONVIF Compliant	Yes, Profile S
Web Browser	IE 11 (Please verify that your computer meets the minimum system requirements for Internet Explorer from Microsoft website.)
Third-party Integration	Point of Sale (POS), Access Control, Network I/O, Parking Management Station (PMS), (Various optional integrations requiring additional license)

## Storage

System Drive	mSATA SSD, 64GB
Storage Bay	SATA, Max. 1 Disk(s) (without storage disks)
HDD Size	2.5"
Maximum Recording Capacity	1TB x1
Supported Storage	Video Recording: SATA disk, iSCSI Video Exporting: iSCSI, USB

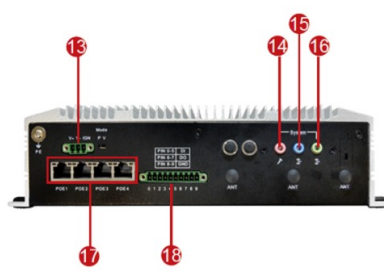
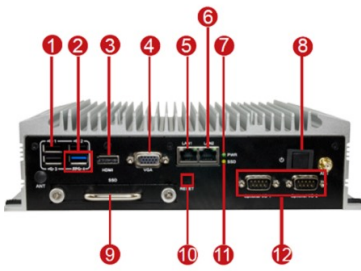
## Interface

Wireless	Built-in GPS, mini-PCIe slot x 4 for optional Wireless modules such as Wi-Fi (IEEE 802.11b/g/n), 4G
External Storage Interface	USB
Local Access	USB joystick, keyboard & mouse
Local Display Interface	HDMI x 1, VGA x 1,

## General

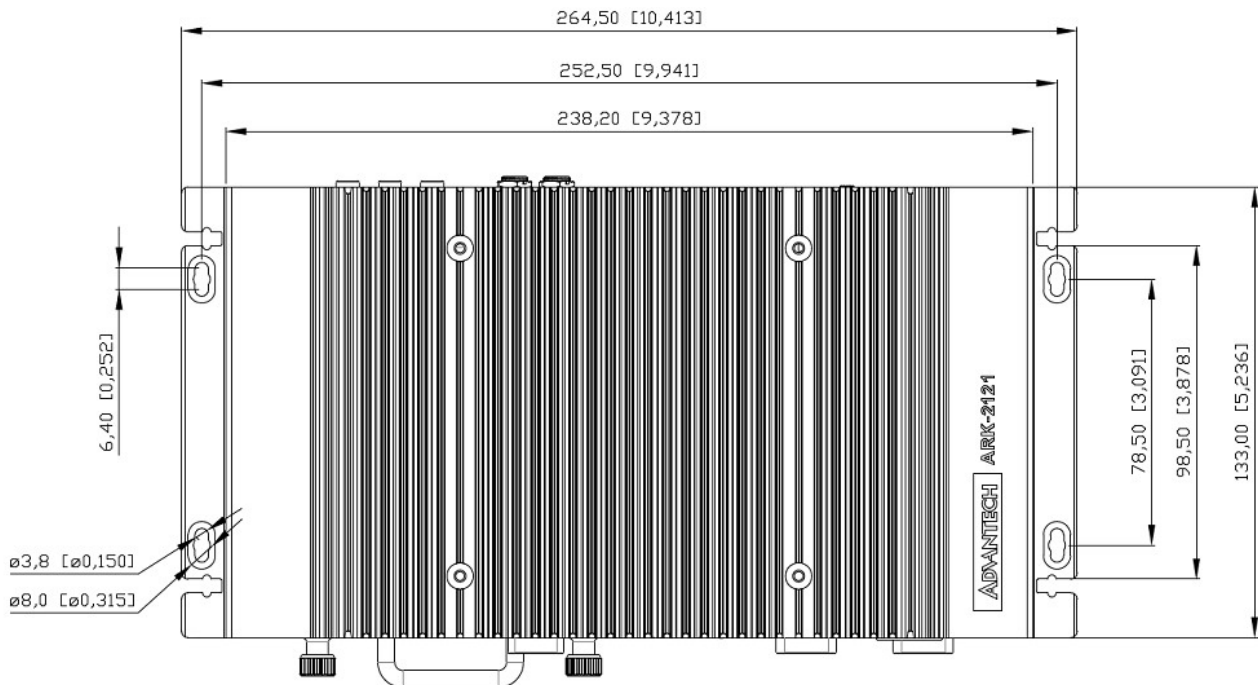
PoE Output	Maximum 15.4 Watts per port
PoE Power Budget	Maximum 30 W
Power Source	DC 12V, DC 9-36V, adapter not included
Weight	2546.5g (5.614lb)
Dimensions	(W x H x D): 264.5mm x 69.2mm x 133mm (10.41" x 2.72" x 5.23")
Bundled Accessories	GPS Active Antenna with 5M Cable and SMA Connector
Operating Temperature	0°C ~ 45°C (32°F ~ 113°F)
Remote Access	Workstation, Web Client, Mobile Client
Approvals	CE, FCC, UL, CCC, BSMI, E-Mark
Warranty	2 Year(s). For extended warranty offering, see <a href="http://www.acti.com/support/warranty">http://www.acti.com/support/warranty</a>

## ► Photo Indication



- 1 USB 2.0 Ports
- 2 USB 3.0 Port
- 3 HDMI Port
- 4 VGA Connector
- 5 LAN 1 Port
- 6 LAN 2 Port
- 7 Power Status LED
- 8 Power Switch
- 9 HDD Trays
- 10 Reset Button
- 11 HDD Activity LED
- 12 Serial Port
- 13 Power Connector
- 14 Audio Mic-in
- 15 Audio Line-in
- 16 Audio Line-out
- 17 PoE Ports
- 18 Digital Input/Output

## ► Dimension Diagram



Unit: mm [inch]

## ▶ Related Products

### Network & Storage Peripherals - Hard Disk

PHDD-1200



WD WD10JUCT 1TB 2.5" Hard Disk Drive for Data Storage (for MNR-310, MNR-320P, MNR-330P)

### Network & Storage Peripherals - Wireless Module

PWLM-0104



Advantech EWM-C117FL01E 4G LTE / 3G / 2G Wireless Module for all MNR (except MNR-310), IVS-010, ECD-200 (US)

PWLM-0105



Advantech EWM-C117FL02E 4G LTE / 3G / 2G Wireless Module for all MNR (except MNR-310), IVS-010, ECD-200 (Europe and Asia)

### Network & Storage Peripherals - Network IO Module

PIOB-0100



Advantech ADAM-6060 6 Digital Input and 6 Digital Output Network I/O Module

### Controllers - Joystick

PJSK-0100



Apem 100-550-BLK-RF Joystick for PTZ Control (for all ENR, INR, and MNR Series)