

## Traffic Control and Monitoring System

Intelligent networks are essential for real-time traffic monitoring systems that require vehicle detection (VDS), changeable message signs (CMS), IP phones and video cameras. Advantech's EKI-1522 Serial Device Server acts as a gateway to transmit data between the control center, traffic controller and marquee. Within the transportation system; video, voice, and data can all be transmitted over TCP/IP networks providing easy, centralized control.

Advantech's DVP-1412E USB video capture card is suitable for vehicle detection systems since its compact-size can be easily integrated into many types hardware to deliver streaming video with D1 resolution at full-motion frame rates. DVX-4370 IVS meets rigorous traffic security demands by providing intelligent video analysis, such as car counting, enter or exiting, detecting non-stop areas, vehicle wrong direction, U-turn, etc. DVX-4170 provides real-time alarms to notify users of any abnormal occurrences through pop-up video, email, alarms, SMS, and phone calls. Furthermore, Advantech products withstand harsh environments, humidity, and vibration through their rugged hardware design.



**EKI-1522**  
2-port RS-232/422/485 Serial Device Server



**DVP-1412E**  
1-ch USB MPEG-4 Video Capture Module with SDK



**EKI-7629C**  
8+2G Combo Port Gigabit Unmanaged Industrial Ethernet Switch



**DVX-4170/4370**  
16-ch Information-enabled DVR Systems/ Intelligent Video System



**EKI-1526**  
16-port RS-232/422/485 Serial Device Server



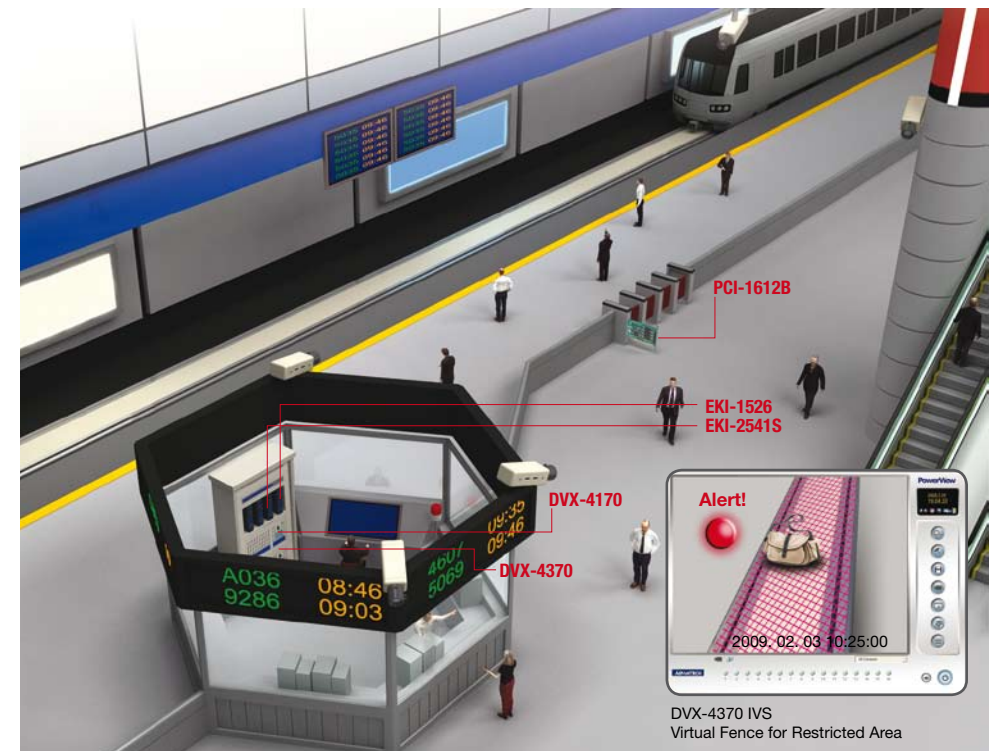
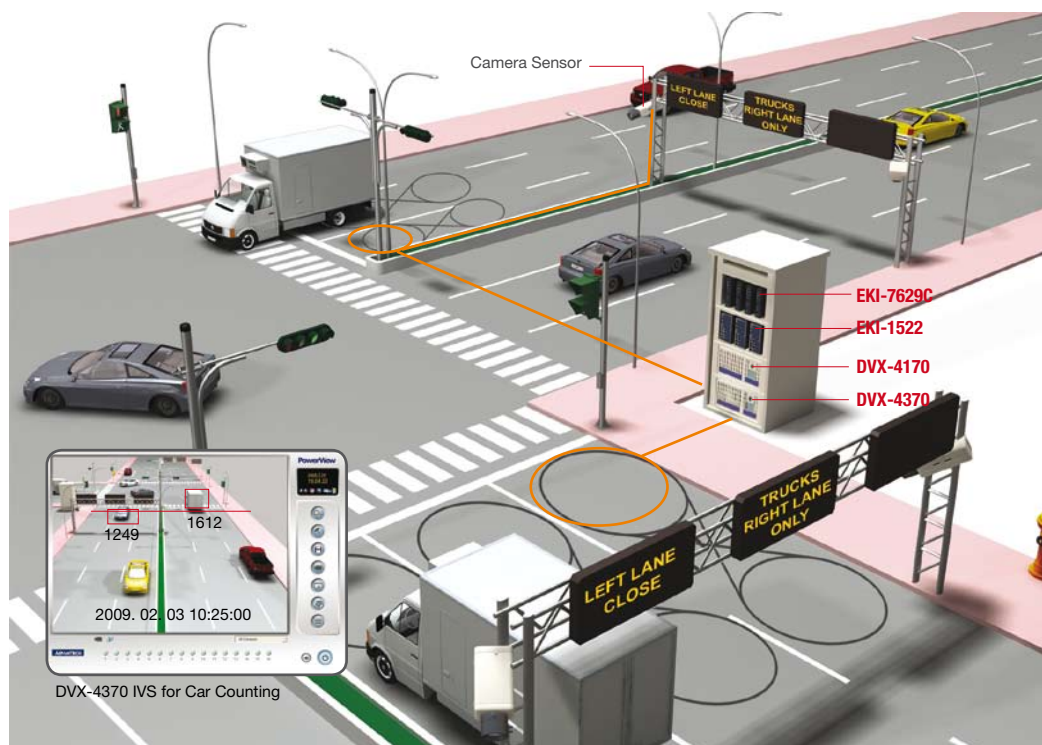
**DVX-4170/4370**  
16-ch Information-enabled DVR Systems/ Intelligent Video System



**EKI-2541S**  
10/100T(X) to Single-Mode SC Type Fiber Optic Industrial Media Converter



**PCI-1612B**  
4-port RS-232/422/485 PCI Comm w/EFT, 4 x DB25



# Power Substation Monitoring System

Video surveillance plays an essential role in monitoring critical equipment and operations within many power substations. DVX-4170 DVR offers Information On-Screen to show the temperature values of connected devices by integrating I/O information. DVX-4370 IVS provides virtual fence functionality to detect perimeters and provide alerts with DVR to inform operators of unauthorized events. In an automated power substation monitoring system, all equipment is measured by SCADA RTU and HMI, and video surveillance systems are connected to the same Ethernet network ensuring all information can be shared by SCADA HMI and video surveillance system.

Advantech's EKI-4654R is designed to be compliant with the IEC61850-3 certification for power automation systems. Both EKI-4654R and EKI-4524RI support dual 100 ~ 240 V<sub>DC</sub>/V<sub>AC</sub> redundancy power input to secure data communication. Moreover, EKI-7554SI supports fiber optic cabling for noise immunity, long-distance transmissions, and scalable bandwidth for future upgrades. Furthermore, all Advantech Managed Ethernet Switches come equipped with the X-Ring, which provides a redundant Ethernet network with ultra high-speed recovery time (< 10 ms).



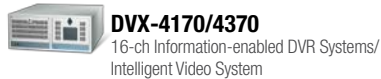
**EKI-4654R**  
24+2 SFP Port Gigabit Managed Redundant Industrial Ethernet Switch



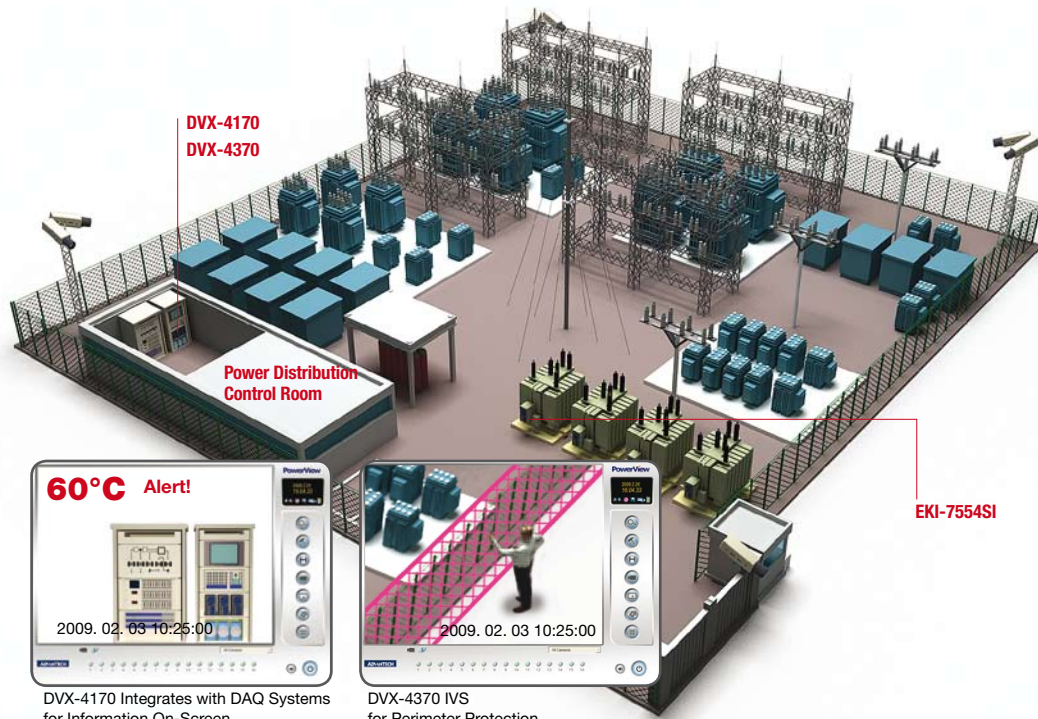
**EKI-7554SI**  
4+2 SC Type Fiber Optic Managed Industrial Ethernet Switch with Wide Temperature



**EKI-4524RI**  
24+2 SFP port Unmanaged Industrial Ethernet Switch



**DVX-4170/4370**  
16-ch Information-enabled DVR Systems/ Intelligent Video System



DVX-4170 Integrates with DAQ Systems for Information On-Screen

DVX-4370 IVS for Perimeter Protection

# Transaction Monitoring with Point of Sale Terminals

Large scale retail stores require reliable communication devices to ensure stable transactions. Advantech serial communication cards provide up to 8 ports, multiple interfaces, and form factors to connect various devices, such as bar scanners, pole displays, label printers, and credit card readers. Furthermore, fiber optics can prevent noise interference and support high-speed (up to 100 Mbps) and high-distance (up to 2 km) transmissions.

In addition, retail stores also require advanced video surveillance to assist management to efficiently monitor transaction processes to observe employees' and customers' behaviors. Advantech's DVX-4170 DVR can integrate with Point of Sale data to synchronize video events with their corresponding transaction data, including product sales, quantities, amounts, and employee ID numbers.



**EKI-2525M**  
4+1 100FX Port Multi-Mode Unmanaged Industrial Ethernet Switch



**DVX-4170**  
16-ch Information-enabled DVR Systems



**PCI-1620B**  
8-port RS-232 PCI Communication Card with EFT Protection



**PV-800E**  
16-ch MPEG-4 Video Capture Card with PowerView



DVX-4170 integrated with Information On-Screen

# Hazardous Equipment Monitoring System

In chemical and petrochemical plants with hazardous areas, rigorous security is required to protect operators and maintain equipment. DVX-4170 DVR connects with ADAM-4000/6000 to integrate video and I/O into one platform so that operators can monitor hazardous equipment with their corresponding temperature, level, pressure, and valve operations onscreen. DVX-4170 offers OCX to integrate WebAccess SCADA software for viewing, controlling, and diagnosing systems with corresponding real-time video. Furthermore, DVX-4270 Central Monitoring System supports multiple monitors and search tools to improve efficiency, and offers instant alerts when an event is triggered.

EKI-1222/1521/2528I has received the UL certification for Class I, Division 2 Groups A, B, C, D in hazardous locations. The EKI-1222 supports bi-directional gateways for integrating Modbus TCP and Modbus RTU/ASCII networks. EKI-1521 features dual Ethernet redundancy to ensure reliable communications and high transmission speeds. Additionally, EKI-2528I provides advanced Ethernet ESD and Surge (EFT for power) protection as well as supporting wide operating temperatures (-40 ~ 75° C).



**EKI-2528I**  
8-port Unmanaged Industrial Ethernet Switch w/ Wide Temperature



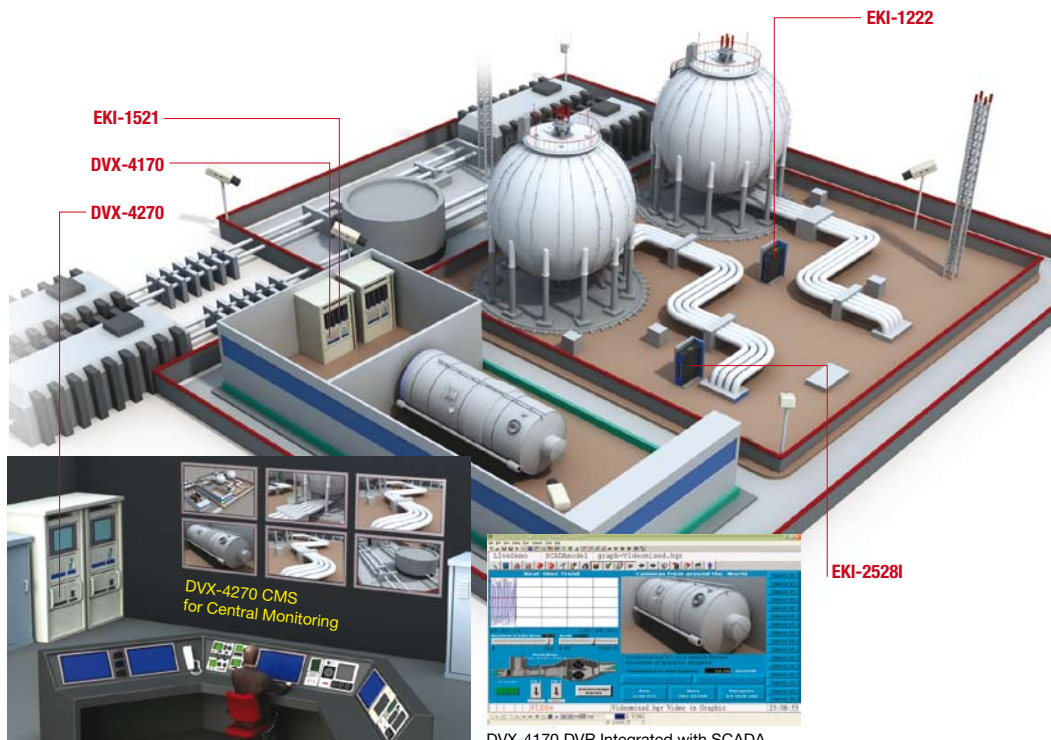
**DVX-4170/4270**  
16-ch Information-enabled DVR Systems/ Video Surveillance Central Monitoring System



**EKI-1521**  
1-port RS-232/422/485 Serial Device Server



**EKI-1222**  
2-port Modbus Gateway



# Production Line Monitoring System

Video surveillance plays an essential role in factory automation, monitoring production lines and inspecting the quality of each good produced. DVX-4170 DVR provides OCX drivers, SDK libraries, and example programs to easily integrate 3rd party devices, such as weight scales, bar codes, PLC controllers, and inspection equipment. For example, DVX-4170 can connect with a card reader via RS232/485 and with a weight scale. The operators can then easily confirm the shipment through the DVX-4170 Information On-Screen function by simply viewing live video of the truck and checking its corresponding driver ID and total truck weight onscreen.

EKI-7659CI/7654C supports both the X-Ring and RSTP, allowing easy connection between the plant and factory floor. More importantly, the X-Ring recovers from a cable disconnection and or network topology change in less than 10 ms. Besides, EKI-1222 provides an interface between Modbus serial devices, such as PLCs, meters, sensors, bar code readers, and computer hosts or HMIs running Modbus/TCP on Ethernet networks. Moreover, EKI-1522 allows serial devices to communicate with other peer-to-peer devices without any intermediate host PC or software programming.



**EKI-1222**  
2-port Modbus Gateway



**EKI-7659CI**  
8+2G Combo Port Gigabit Managed Redundant Industrial Ethernet Switch w/ Wide Temperature



**DVX-4170**  
16-ch Information-enabled DVR Systems



**EKI-1522**  
2-port RS-232/422/485 Serial Device Server



**EKI-7654C**  
4+2G Combo Port Gigabit Managed Redundant Industrial Ethernet Switch



# Unmanaged Ethernet Switches



## Gigabit, Industrial Unmanaged Ethernet Switches & Media Converters

Advantech's Unmanaged Ethernet Switches and Media Converters feature IP30 metal chassis with a compact, durable and reliable design, and advanced Ethernet ESD and Surge (EFT for Power) protection. These EKI models support +12~48 V<sub>DC</sub> redundant power input and power polarity reverse protection and provide flexible DIN-rail & panel mounting options, making the EKI Unmanaged Ethernet Switches the most widely used and popular communication devices in the industrial market.



### EKI-4524RI

#### 24+2 SFP port Unmanaged Industrial Ethernet Switch

- 1U 19" rack mount with 2 SFP and 24 Fast Ethernet ports
- Supports 110~220V<sub>AC</sub>/V<sub>DC</sub> power input
- Front panel LEDs simplify the monitoring and management
- Wide operating temperature from -40~85° C

#### Ordering Information

- EKI-4524RI 24+2 SFP port Unmanaged Ethernet Switch



### EKI-7626C/7629C/7629CI

#### 16+2G/8+2G Combo Port Gigabit Unmanaged Industrial Ethernet Switch

- Provides 2 Gigabit Copper/SFP combo port plus 16/8 Fast Ethernet ports
- SFP socket for easy and flexible fiber expansion
- Supports 4,000 V<sub>DC</sub> Ethernet ESD protection
- Supports 3,000 V<sub>DC</sub> surge (EFT) protection for power line
- Supports Dual 12 ~ 48 V<sub>DC</sub> power input and 1 relay output

#### Ordering Information

- EKI-7626C 16+2G Gigabit Unmanaged Ethernet Switch
- EKI-7629C 8+2G Gigabit Unmanaged Ethernet Switch
- EKI-7629CI 8+2G Giga Unmanaged Ethernet Switch w/Wide Temp



### EKI-2725

#### 5-port Gigabit Unmanaged Industrial Ethernet Switch

- Provides 5 Gigabit Ethernet ports with Auto MDI/MDI-X
- Supports 10/100/1000 Mbps Auto Negotiation
- Supports jumbo frame transmission up to 9k bytes
- Provides surge (EFT) protection 3,000 V<sub>DC</sub> for power line
- Supports redundant 12 ~ 48 V<sub>DC</sub> power input and P-Fail relay

#### Ordering Information

- EKI-2725 5-port Gigabit Ethernet Switch



### EKI-2728

#### 8-port Gigabit Unmanaged Industrial Ethernet Switch

- Provides 8 Gigabit Ethernet ports with Auto MDI/MDI-X
- Supports 10/100/1000 Mbps Auto Negotiation
- Supports jumbo frame transmission up to 9k bytes
- Provides surge (EFT) protection 3,000 V<sub>DC</sub> for power line
- Supports Redundant 12 ~ 48 V<sub>DC</sub> power input and P-Fail relay

#### Ordering Information

- EKI-2728 8-port Gigabit Ethernet Switch



### EKI-2525/I

#### 5-port Unmanaged Industrial Ethernet Switch

- Provides 5 Fast Ethernet ports with Auto MDI/MDI-X
- Supports 4,000 V<sub>DC</sub> Ethernet ESD protection
- Provides surge (EFT) protection 3,000 V<sub>DC</sub> for power line
- Supports redundant 12 ~ 48 V<sub>DC</sub> power input and P-Fail relay
- Supports wide operating temperatures from -40 ~ 75° C (EKI-2525I)

#### Ordering Information

- EKI-2525 5-port Ethernet Switch
- EKI-2525I 5-port Ethernet Switch w/ Wide Temp



### EKI-2528/I

#### 8-port Unmanaged Industrial Ethernet Switch

- Provides 8 Fast Ethernet ports with Auto MDI/MDI-X
- Supports 4,000 V<sub>DC</sub> Ethernet ESD protection
- Provides surge (EFT) protection 3,000 V<sub>DC</sub> for power line
- Supports redundant 12 ~ 48 V<sub>DC</sub> power input and P-Fail relay
- Supports wide operating temperatures from -40 ~ 75° C (EKI-2528I)

#### Ordering Information

- EKI-2528 8-port Ethernet Switch
- EKI-2528I 8-port Ethernet Switch w/ Wide Temp



### EKI-2525M

#### 4+1 100FX Port Multi-Mode Unmanaged Industrial Ethernet Switch

- Provides 4 x 10/100 Mbps Ethernet ports with RJ-45 connector
- Provides 1 x 100 Mbps Multi-mode SC type fiber optic port
- Provides 3,000 V<sub>DC</sub> surge (EFT) protection
- Provides 4,000 V<sub>DC</sub> Ethernet ESD protection
- Provides redundant 12 ~ 48 V<sub>DC</sub> power input

#### Ordering Information

- EKI-2525M 5-port Ethernet Switch w/ 1-port 100FX MM



### EKI-2526M

#### 4+2 100FX Port Multi-Mode Unmanaged Industrial Ethernet Switch

- Provides 4 x 10/100 Mbps Ethernet ports with RJ-45 connector
- Provides 2 x 100 Mbps Multi-mode SC type fiber optic port
- Provides 3,000 V<sub>DC</sub> surge (EFT) protection
- Provides 4,000 V<sub>DC</sub> Ethernet ESD protection
- Provides redundant 12 ~ 48 V<sub>DC</sub> power input

#### Ordering Information

- EKI-2526M 6-port Ethernet Switch w/ 2-port 100FX MM



### EKI-2526S

#### 4+2 100FX Port Single-Mode Unmanaged Industrial Ethernet Switch

- Provides 4 x 10/100 Mbps Ethernet ports with RJ-45 connector
- Provides 2 x 100 Mbps Single-mode SC type fiber optic port
- Provides 3,000 V<sub>DC</sub> surge (EFT) protection
- Provides 4,000 V<sub>DC</sub> Ethernet ESD protection
- Provides redundant 12 ~ 48 V<sub>DC</sub> power input

#### Ordering Information

- EKI-2526S 6-port Ethernet Switch w/ 2-port 100FX SM

## Media Converters



### EKI-2541M/MI

#### 10/100T(X) to Multi-Mode SC Type Fiber Optic Industrial Media Converter

- Provides 1 x 10/100 Mbps Ethernet port with RJ45 connector
- Provides 1 x 100 Mbps Multi-mode SC type fiber port
- Provides internal jumper for Link Fault Pass-through (LFP) setting
- Supports store and forward transmission
- Supports wide operating temperatures from -40 ~ 75° C (EKI-2541MI)

#### Ordering Information

- EKI-2541M Ethernet to MM Fiber Converter
- EKI-2541MI Ethernet to MM Fiber Converter w/ Wide Temp



### EKI-2541S/SI

#### 10/100T(X) to Single-Mode SC Type Fiber Optic Industrial Media Converter

- Provides 1 x 10/100 Mbps Ethernet port with RJ45 connector
- Provides 1 x 100 Mbps Single-mode SC type fiber port
- Provides internal jumper for Link Fault Pass-through (LFP) setting
- Supports store and forward transmissions
- Supports wide operating temperatures from -40 ~ 75° C (EKI-2541SI)

#### Ordering Information

- EKI-2541S Ethernet to SM Fiber Converter
- EKI-2541SI Ethernet to SM Fiber Converter w/ Wide Temp



### EKI-2741F

#### 10/100/1000T(X) to SFP Type Fiber Optic Gigabit Industrial Media Converter

- Provides 1 x 1000 Mbps Ethernet port with RJ45 connector
- Provides 1 x 1000 Mbps fiber optic port with SFP (mini-GBIC) type connector for 1000Base-SX/LX device
- Provides DIP switch for full/half duplex setting
- Provides Link Fault Pass-through (LFP)
- Jumbo Frame: 9k bytes

#### Ordering Information

- EKI-2741F Giga Ethernet to SFP Type Fiber Converter



### EKI-2741SX

#### 10/100/1000T(X) to Fiber Optic Gigabit Industrial Media Converter

- Provides 1 x 1000 Mbps Ethernet port with RJ45 connector
- Provides 1 x 1000 Mbps fiber optic port with SFP (mini-GBIC) type connector for 1000Base-SX/LX device
- Provides DIP switch for full/half duplex setting
- Provides Link Fault Pass-through (LFP)
- Jumbo Frame: 9k bytes

#### Ordering Information

- EKI-2741SX Giga Ethernet to 1000Base-SX Fiber Converter



### EKI-2741LX/LXI

#### 10/100/1000T(X) to Fiber Optic Gigabit Industrial Media Converters

- Provides 1 x 1000 Mbps Ethernet port with RJ45 connector
- Provides 1 x 1000 Mbps fiber optic port with SFP (mini-GBIC) type connector for 1000Base-SX/LX device
- Provides DIP switch for full/half duplex setting
- Supports wide operating temperatures from -40 ~ 75° C (EKI-2741LXI)
- Jumbo Frame: 9k bytes

#### Ordering Information

- EKI-2741LX Giga Ethernet to 1000Base-LX Fiber Converter
- EKI-2741LXI Ethernet to 1000Base-LX Converter w/Wide Temp

## Industrial PoE Switches



### EKI-2525P

#### 5-port Industrial PoE Switch

- Provides 5 Fast Ethernet ports with 4 PoE ports with injector function
- Provides broadcast storm protection
- Supports Ethernet ESD protection
- Provides surge (EFT) protection 3,000 V<sub>DC</sub> for power line
- Supports redundant 48 V<sub>DC</sub> power input and P-Fail relay

#### Ordering Information

- EKI-2525P 5-port PoE Switch



### EKI-2525PA

#### 5-port Industrial PoE Switch with 24/48 V<sub>DC</sub> Power Input

- Provides 5 Fast Ethernet ports with 4 PoE ports with injector function
- Provides broadcast storm protection
- Supports Ethernet ESD protection
- Provides surge (EFT) protection 3,000 V<sub>DC</sub> for power line
- Supports redundant 24/48 V<sub>DC</sub> power input and P-Fail relay

#### Ordering Information

- EKI-2525PA 5-port PoE Switch 24/48 V<sub>DC</sub> Power Input



### EKI-2526PI

#### 6-port Industrial PoE Switch with Wide Temperature

- Provides 6 Fast Ethernet ports with 4 PoE ports with injector function
- Supports Ethernet ESD protection
- Provides surge (EFT) protection 3,000 V<sub>DC</sub> for power line
- Supports redundant 48 V<sub>DC</sub> power input and P-Fail relay
- Supports wide operating temperature -40 ~ 75° C

#### Ordering Information

- EKI-2526PI 6-port PoE Switch w/ Wide Temp



### EKI-2701PSI

#### Industrial PoE Splitter with Wide Temperature

- Supports 10/100/1000T(X) for PoE in and data out
- IEEE 802.3af compliant split power/data from PoE equipment
- Power Isolation and short circuit protection for power output
- Supports operating temperatures from -40 ~ 75° C
- Provides EFT protection 3000 V<sub>DC</sub> for power line

#### Ordering Information

- EKI-2701PSI PoE Splitter w/ Wide Temp

## Unmanaged Ethernet Switch Selection Guide

Model Name		EKI-4524RI	EKI-7626C	EKI-7629C/CI	EKI-2725/2728
Description		24+2 SFP port Unmanaged Industrial Ethernet Switch	16+2G Combo Port Gigabit Unmanaged Industrial Ethernet Switch	8+2G Combo Port Gigabit Unmanaged Industrial Ethernet Switch	5/8-port Gigabit Unmanaged Industrial Ethernet Switch
Interface	Ports	26	18	10	5/8
	10/100Base-T(X)	24	16	8	-
	100BaseFX	2	-	-	-
	10/100/1000Base-T(X)	-	2	2	5/8
Power	1000Base-SX/LX/LHX/XD/ZX/EZX	-	2	2	-
	2 x Unregulated 12 ~ 48 V <sub>DC</sub>	-	V	V	V
	110 ~ 220 V <sub>DC</sub> /V <sub>AC</sub>	V	-	-	-
Mechanism	Relay Output	V	V	V	V
	DIN-rail Mount	-	V	V	V
	Wall Mount	-	V	V	V
	Rack Mount	V	-	-	-
Protection	IP30	V	V	V	V
	ESD (Ethernet)	V	V	V	V
	Surge (EFT for power)	V	V	V	V
Operating Temperature	Power Reverse	V	V	V	V
	-10 ~ 60° C (14 ~ 140° F)	-	V	V	V
	-40 ~ 75° C (-40 ~ 167° F)	-	-	V (EKI-7629CI)	-
	-40 ~ 85° C (-40 ~ 185° F)	V	-	-	-

## Unmanaged Ethernet Switch Selection Guide

Model Name		EKI-2525/I	EKI-2528/I	EKI-2525M	EKI-2526M/S
Description		5-port Unmanaged Industrial Ethernet Switch	8-port Unmanaged Industrial Ethernet Switch	4+1 100FX Port Multi-Mode Unmanaged Industrial Ethernet Switch	4+2 100FX Port Multi-Mode/Single-Mode Industrial Ethernet Switch
Interface	Ports	5	8	5	6
	10/100Base-T(X)	5	8	4	4
	100BaseFX	-	-	1	2
	10/100/1000Base-T(X)	-	-	-	-
	1000Base-SX/LX/LHX/XD/ZX/EZX	-	-	-	-
Power	2 x Unregulated 12 ~ 48 V <sub>DC</sub>	V	V	V	V
	110 ~ 220 V <sub>DC</sub> /V <sub>AC</sub>	-	-	-	-
	Relay Output	V	V	V	V
Mechanism	DIN-rail Mount	V	V	V	V
	Wall Mount	V	V	V	V
	Rack Mount	-	-	-	-
	IP30	V	V	V	V
Protection	ESD (Ethernet)	V	V	V	V
	Surge (EFT for power)	V	V	V	V
	Power Reverse	V	V	V	V
Operating Temperature	-10 ~ 60° C (14 ~ 140° F)	V	V	V	V
	-40 ~ 75° C (-40 ~ 167° F)	V (EKI-2525I)	V (EKI-2528I)	-	-
	-40 ~ 85° C (-40 ~ 185° F)	-	-	-	-

## Media Converter Selection Guide

EKI-2541M/MI	EKI-2541S/SI	EKI-2741F	EKI-2741SX	EKI-2741LX/LXI
10/100T(X) to Multi-Mode SC Type Fiber Optic Industrial Media Converter	10/100T(X) to Single-Mode SC Type Fiber Optic Industrial Media Converter	10/100/1000T(X) to SFP Type Fiber Optic Gigabit Industrial Media Converter	10/100/1000T(X) to 1000Base-SX Fiber Optic Gigabit Industrial Media Converter	10/100/1000T(X) to 1000Base-LX Fiber Optic Gigabit Industrial Media Converter
2	2	2	2	2
1	1	-	-	-
1	1	-	-	-
-	-	1	1	1
-	-	1	1	1
V	V	V	V	V
-	-	-	-	-
V	V	V	V	V
V	V	V	V	V
V	V	V	V	V
-	-	-	-	-
V	V	V	V	V
V	V	V	V	V
V	V	V	V	V
V	V	V	V	V
V (EKI-2541MI)	V (EKI-2541SI)	-	-	V (EKI-2741LXI)
-	-	-	-	-

## Industrial PoE Switch Selection Guide

Model Name	EKI-2525P	EKI-2525PA	EKI-2526PI	EKI-2701PSI	
Description	5-port Industrial PoE Switch	5-port Industrial PoE Switch with 24/48 V <sub>DC</sub> Power Input	6-port Industrial PoE Switch with Wide Temperature	Industrial PoE Splitter with Wide Temperature	
Interface	Ports	5	5	2	
	10/100Base-T(X)	1	1	2	
	100BaseFX	-	-	-	
	10/100/1000Base-T(X)	-	-	1	
	1000Base-SX/LX/LHX/XD/ZX/EZX	-	-	-	
	PoE (10/100 Mbps)	4	4	4	
	PoE (10/100/1000 Mbps)	-	-	-	1
	M12 Connector (10/100 Mbps)	-	-	-	-
	DI/DO	-	-	-	-
	Console	-	-	-	-
Power	2 x Unregulated 12 ~ 48 V <sub>DC</sub>	V (48 V <sub>DC</sub> for PoE)	V (24/48 V <sub>DC</sub> for POE)	V	
	110 ~ 220 V <sub>DC</sub> /V <sub>AC</sub>	-	-	-	
	Relay Output	V	V	V	
Mechanism	DIN-rail Mount	V	V	V	
	Wall Mount	V	V	V	
	Rack Mount	-	-	-	
	IP30	V	V	V	
Protection	ESD (Ethernet)	V	V	V	
	Surge (EFT for power)	V	V	V	
	Power Reverse	V	V	V	
Operating Temperature	-10 ~ 60° C (14 ~ 140° F)	V	V	-	
	-40 ~ 75° C (-40 ~ 167° F)	-	-	V	

## Managed Ethernet Switches



### EKI-7000 Managed Ethernet Switches Ensure Reliable Connectivity

Advantech's Industrial Managed Ethernet Switches allow data transmission rates up to 1000 Mbps, and can be seamlessly integrated into high-level data acquisition systems. Advantech's X-Ring technology offers the fastest redundant ring recovery time (< 10ms) ensuring secure data communication, reliability and high-speed network infrastructures. Furthermore, the robust design, DIN-rail mounting and +12 ~ 48 V<sub>DC</sub> redundant power inputs make EKI-7000 suitable for rugged industrial applications.



### EKI-4654R

#### 24+2 SFP Port Gigabit Managed Redundant Industrial Ethernet Switch

- 1U 19" rack-mount, 2 SFP ports, plus 24 Fast Ethernet ports
- Redundancy: Gigabit X-Ring (ultra high-speed recovery time < 10 ms), RSTP/STP (802.1w/1D)
- Fully integrated, dual-redundant power supply design: 2 x 100 ~ 240 VAC/100 ~ 240 Vdc
- Front panel LEDs simplify the monitoring and management
- Designed to be IEC-61850-3 compliant

#### Ordering Information

- EKI-4654R 24+2 SFP Port Gigabit Managed Redundant Industrial Ethernet Switch
- EKI-4654R/12S 20+2 SFP Giga Managed Redundant Ethernet Switch
- EKI-4654R/12M 20+2 SFP Giga Managed Redundant Ethernet Switch



### EKI-7758F

#### 4G+4 SFP Gigabit Managed Redundant Industrial Ethernet Switch

- All Gigabit Ethernet ports for 4 Copper and 4 SFP
- SFP sockets for easy and flexible fiber expansion
- Redundancy: Gigabit X-Ring (ultra high-speed recovery time < 10ms), RSTP/STP (802.1w/1D)
- Control: VLAN/GVRP, QoS, IGMP Snooping/Query, LACP, Rate Limit
- Security: IP/MAC and port binding, DHCP Server, IP access list, 802.1X

#### Ordering Information

- EKI-7758F 4G+4 SFP Managed Gigabit Ethernet Switch



### EKI-7656C/CI

#### 16+2G Combo Port Gigabit Managed Redundant Industrial Ethernet Switch

- 2 Gigabit Copper/SFP combo ports, plus 16 Fast Ethernet ports
- SFP socket for easy and flexible fiber expansion
- Redundancy: Gigabit X-Ring (ultra high-speed recovery time < 10 ms), RSTP/STP (802.1w/1D)
- Control: VLAN/GVRP, QoS, IGMP Snooping/Query, LACP, Rate Limit
- Security: IP/MAC and port binding, DHCP Server, IP access list, 802.1X, SNMPv3

#### Ordering Information

- EKI-7656C 16+2G Giga Managed Ethernet Switch
- EKI-7656CI 16+2G Giga Managed Ethernet Switch w/Wide Temp



### EKI-7659C/CI

#### 8+2G Combo Port Gigabit Managed Redundant Industrial Ethernet Switch

- 2 Gigabit Copper/SFP combo ports, plus 8 Fast Ethernet ports
- Redundancy: Gigabit X-Ring (ultra high-speed recovery time < 10ms), RSTP/STP (802.1w/1D)
- Control: VLAN/GVRP, QoS, IGMP Snooping/Query, LACP, Rate Limit
- Security: IP/MAC and port binding, DHCP Server, IP access list, 802.1X, SNMPv3
- Supports wide operating temperatures from -40 ~ 75° C (EKI-7659CI)

#### Ordering Information

- EKI-7659C 8+2G Giga Managed Ethernet Switch
- EKI-7659CI 8+2G Giga Managed Ethernet Switch w/Wide Temp



### EKI-7657C

#### 7+3G Combo Port Gigabit Managed Redundant Industrial Ethernet Switch with 2 x DI/O

- 3 Gigabit Copper/SFP combo ports, plus 7 Fast Ethernet ports
- 2 Digital Inputs and 2 Digital Outputs for events and alarms
- Redundancy: Gigabit X-Ring (ultra high-speed recovery time < 10ms), RSTP/STP (802.1w/1D)
- Control: VLAN/GVRP, QoS, IGMP Snooping/Query, LACP, Rate Limit
- Security: IP/MAC and port binding, DHCP Server, IP access list, 802.1X, SNMPv3

#### Ordering Information

- EKI-7657C 7+3G Giga Managed Ethernet Switch w/2 x DI/O



### EKI-7654C

#### 4+2G Combo Port Gigabit Managed Redundant Industrial Ethernet Switch

- 2 Gigabit Copper/SFP combo ports, plus 4 Fast Ethernet ports
- SFP socket for easy and flexible fiber expansion
- Redundancy: Gigabit X-Ring (ultra high-speed recovery time < 10 ms), RSTP/STP (802.1w/1D)
- Control: VLAN/GVRP, QoS, IGMP Snooping/Query, LACP, Rate Limit
- Limit Security: IP/MAC and port binding, DHCP Server, IP access list, 802.1X, SNMPv3

#### Ordering Information

- EKI-7654C 4+2G Gigabit Managed Ethernet Switch



### EKI-7554SI

#### 4+2 SC Type Fiber Optic Managed Industrial Ethernet Switch with Wide Temperature

- 2 x Single-mode fiber ports, plus 4 Fast Ethernet ports
- Redundancy: X-Ring (high-speed recovery time < 10 ms), RSTP/STP (802.1w/1D)
- Control: VLAN/GVRP, QoS, IGMP Snooping/Query, LACP, Rate Limit
- Security: IP/MAC, port binding, DHCP Server, IP access list, 802.1X, SNMPv3
- Supports wide operating temperature -40 ~ 75° C

#### Ordering Information

- EKI-7554SI 4+2 SM Fiber Managed Ethernet Switch w/Wide Temp



### EKI-7554MI

#### 4+2 SC Type Fiber Optic Managed Industrial Ethernet Switch with Wide Temperature

- 2 x Multi-mode fiber ports, plus 4 Fast Ethernet ports
- Redundancy: X-Ring (high-speed recovery time < 10 ms), RSTP/STP (802.1w/1D)
- Control: VLAN/GVRP, QoS, IGMP Snooping/Query, LACP, Rate Limit
- Security: IP/MAC, port binding, DHCP Server, IP access list, 802.1X, SNMPv3
- Supports wide operating temperature -40 ~ 75° C

#### Ordering Information

- EKI-7554MI 4+2 MM Fiber Managed Ethernet Switch w/Wide Temp



### EKI-7559SI

#### 8+2 SC Type Fiber Optic Managed Industrial Ethernet Switch with Wide Temperature

- 2 x Single-mode fiber ports, plus 8 Fast Ethernet ports
- Redundancy: X-Ring (ultra high-speed recovery time < 10 ms), RSTP/STP (802.1w/1D)
- Control: VLAN/GVRP, QoS, IGMP Snooping/Query, LACP, Rate Limit
- Security: IP/MAC and port binding, DHCP Server, IP access list, 802.1X, SNMPv3
- Supports wide operating temperature -40 ~ 75° C

#### Ordering Information

- EKI-7559SI 8+2 SM Fiber Managed Ethernet Switch w/Wide Temp



### EKI-7559MI

#### 8+2 SC Type Fiber Optic Managed Industrial Ethernet Switch with Wide Temperature

- 2 x Multi-mode fiber ports, plus 8 Fast Ethernet ports
- Redundancy: X-Ring (ultra high-speed recovery time < 10 ms), RSTP/STP (802.1w/1D)
- Control: VLAN/GVRP, QoS, IGMP Snooping/Query, LACP, Rate Limit
- Security: IP/MAC and port binding, DHCP Server, IP access list, 802.1X, SNMPv3
- Supports wide operating temperature -40 ~ 75° C

#### Ordering Information

- EKI-7559MI 8+2 MM Fiber Managed Ethernet Switch w/Wide Temp

## Wireless AP/Client Bridge



### EKI-6311G

#### 802.11b/g Wireless Access Point/Client Bridge

- IEEE 802.11b/g compatible
- IEEE 802.3af Power over Ethernet (PoE) support
- Output power up to 19dBm (80mW)
- WEP/WPA/WPA2/ IEEE 802.1x authentication support
- IP65 compliance protects against dust and water

#### Ordering Information

- EKI-6311G 802.11b/g Wireless AP/Client Bridge (US)
- EKI-6311G/EU 802.11b/g Wireless AP/Client Bridge (EU)



## Accessories

### Small Form-factor Pluggable (SFP) Transceiver Modules

- Industry standard small form pluggable (SFP) package
- Immovable lock design
- Hot swappable
- Duplex LC connector
- Full duplex speeds support

#### Ordering Information

- SFP-FXM/LC 100Base-FX Multi-mode SFP module
- SFP-FXS/LC-30 100Base-FX Single-mode SFP module
- SFP-GSX/LC 1000Base-SX Multi-mode SFP module
- SFP-GLX/LC-10 1000Base-LX Single-mode SFP module (10 km)
- SFP-GLX/LC-20 1000Base-LX Single-mode SFP module (20 km)
- SFP-GLX/LC-40 1000Base-LX Single-mode SFP module (40 km)
- SFP-GTX/RJ45 1000Base RJ45 SFP module

## Managed Ethernet Switch Selection Guide

Model Name	EKI-4654R	EKI-7758F	EKI-7656C/CI	EKI-7659C/CI	EKI-7657C		
Description	24+2 SFP Port Gigabit, Managed Redundant Industrial Ethernet Switch	4G+4SFP Gigabit Managed, Redundant Industrial Ethernet Switch	16+2G Combo Port Gigabit, Managed Redundant Industrial Ethernet Switch	8+2G Combo Port Gigabit, Managed Redundant Industrial Ethernet Switch	7+3G Combo Port Gigabit, Managed Redundant Industrial Ethernet Switch with 2 x DI/O		
Interface	Ports	26	8	18	10	10	
	10/100Base-T(X)	24	-	16	8	7	
	100BaseFX	-	-	-	-	-	
	10/100/1000 Base-T(X)	-	4	2	2	3	
	1000Base-SX/LX/LHX/XD/ZX/EZX	2	4	2	2	3	
	DI/DO	-	-	-	-	4	
Network Management	Console	V	V	V	V	V	
	Redundancy	V	V	V	V	V	
	VLAN	V	V	V	V	V	
	SNMP	V	V	V	V	V	
	Security	V	V	V	V	V	
	Traffic Control	V	V	V	V	V	
	Power	2 x Unregulated 12 ~ 48 V <sub>DC</sub>	-	V	V	V	V
		2x Unregulated 100 ~ 240 V <sub>DC</sub>	V	-	-	-	-
		2 x Unregulated 100 ~ 240 V <sub>AC</sub>	V	-	-	-	-
		Relay Output	V	V	V	V	V
Mechanism	DIN-rail Mount	-	V	V	V	V	
	Wall Mount	-	V	V	V	V	
	Rack Mount	V	-	-	-	-	
	IP30	V	V	V	V	V	
Protection	ESD (Ethernet)	V	V	V	V	V	
	Surge (EFT for power)	V	V	V	V	V	
	Power Reverse	V	V	V	V	V	
Operating Temperature	-10 ~ 60° C (14 ~ 140° F)	-	V	V	V	V	
	-40 ~ 75° C (-40 ~ 167° F)	-	-	V (EKI-7656C)	V (EKI-7659C)	-	
	-40 ~ 85° C (-40 ~ 185° F)	V	-	-	-	-	

## Managed Ethernet Switch Selection Guide

Model Name	EKI-7654C	EKI-7554SI/MI	EKI-7559SI/MI
Description	4+2G Combo Port Gigabit, Managed Redundant Industrial Ethernet Switch	4+2 SC-type Fiber Optic, Managed Redundant Industrial Ethernet Switch with Wide Temperature	8+2 SC-type Fiber Optic, Managed Redundant Industrial Ethernet Switch with Wide Temperature
Interface	Ports	6	10
	10/100Base-T(X)	4	8
	100BaseFX	-	2
	10/100/1000 Base-T(X)	2	-
	1000Base-SX/LX/LHX/XD/ZX/EZX	2	-
	DI/DO	-	-
	Console	V	V
Network Management	Redundancy	V	V
	VLAN	V	V
	SNMP	V	V
	Security	V	V
	Traffic Control	V	V
Power	2 x Unregulated 12 ~ 48 V <sub>DC</sub>	V	V
	2x Unregulated 100 ~ 240 V <sub>DC</sub>	-	-
	2 x Unregulated 100 ~ 240 V <sub>AC</sub>	-	-
	Relay Output	V	V
	DIN-rail Mount	V	V
Mechanism	Wall Mount	V	V
	Rack Mount	-	-
	IP30	V	V
	ESD (Ethernet)	V	V
Protection	Surge (EFT for power)	V	V
	Power Reverse	V	V
	Operating Temperature	-10 ~ 60° C (14 ~ 140° F)	-
Operating Temperature	-40 ~ 75° C (-40 ~ 167° F)	-	V
	-40 ~ 85° C (-40 ~ 185° F)	-	-

## Wireless AP/Client Bridge

Model Name	EKI-6311G	
Description	802.11b/g Wireless Access Point/Client Bridge	
Interface	IEEE 802.11b/g	V
	10/100Base-T(X)	1
	RF Connector	2 (SMA-Fr)
RF	Transmit Output Power	17dBm +-2
	Receive Sensitivity	-76dBm@54Mbps -96dBm@1Mbps
Operation Mode	Access Point	V
	Client Bridge	V
	WDS	V
	Repeater	-
	AP-Router	V
Security	WEP 64/128 bits	V
	WPA	V
	WPA2	V
	PSK with TKIP/AES	V
	IEEE 802.1x	V
	IEEE 802.1x Supplicant	V
	MAC filter	V
Power	Layer 2 isolation	V
	Hide SSID beacons	V
	Active Ethernet (PoE), 48 V <sub>DC</sub> /0.375 A	V
	Wall Mount	V
Mechanism	Mast Mount	V
	DIN-rail Mount	-
	IP65	V
Operating Temperature	-10 ~ 60° C (14 ~ 140° F)	V

## Serial Device Servers



### EKI-1000 Serial Device Servers Provide Redundant Communications

Advantech's Serial Device Servers support high baud rates and extreme throughput, up to 921.6 kbps serial speed, quick response times (< 10ms), and dual Ethernet connections for LAN redundancy (< 3 seconds). Moreover, it combines a rugged and reliable design with fast 1/2/4/8/16 x RS-232/422/485 serial ports, providing fast, reliable and high-end Serial to Ethernet communications.



#### EKI-1351

##### 1-port RS-232/422/485 to 802.11b/g WLAN Serial Device Server

- Link any serial device to an IEEE 802.11b/g network
- Supports wireless LAN Ad-Hoc and Infrastructure modes
- Provides COM port redirection, TCP, UDP, and pair connection modes
- Supports baud rate up to 921.6 kbps
- Provides Web-based configuration and Windows utility

##### Ordering Information

- EKI-1351 1-port 802.11b/g WLAN Serial Device Server



#### EKI-1352

##### 2-port RS-232/422/485 to 802.11b/g WLAN Serial Device Server

- Link any serial device to an IEEE 802.11b/g network
- Supports wireless LAN Ad-Hoc and Infrastructure modes
- Provides COM port redirection, TCP, UDP, and pair connection modes
- Supports baud rate up to 921.6 kbps
- Provides Web-based configuration and Windows utility

##### Ordering Information

- EKI-1352 2-port 802.11b/g WLAN Serial Device Server



## EKI-1521

### 1-port RS-232/422/485 Serial Device Server

- Provides 2 x 10/100 Mbps Ethernet ports for LAN redundancy
- Provides COM port redirection (Virtual COM), TCP and UDP operation modes
- Supports baud rate up to 921.6 kbps
- Provides rich configuration methods including Windows utility, Telnet console, and Web Browser
- SNMP MIB-II for network management

#### Ordering Information

- EKI-1521 1-port RS-232/422/485 Serial Device Server



## EKI-1526

### 16-port RS-232/422/485 Serial Device Server

- Provides 2 x 10/100 Mbps Ethernet ports for LAN redundancy
- Supports baud rate up to 921.6 kbps
- Provides COM port redirection (Virtual COM), TCP and UDP operation modes
- Provides rich configuration methods: Windows utility, Telnet console, Web Browser, and serial console
- SNMP MIB-II for network management

#### Ordering Information

- EKI-1526 16-port RS-232/422/485 Serial Device Server



## EKI-1522

### 2-port RS-232/422/485 Serial Device Server

- Provides 2 x 10/100 Mbps Ethernet ports for LAN redundancy
- Provides COM port redirection (Virtual COM), TCP and UDP operation modes
- Supports baud rate up to 921.6 kbps
- Provides rich configuration methods including Windows utility, Telnet console, and Web Browser
- SNMP MIB-II for network management

#### Ordering Information

- EKI-1522 2-port RS-232/422/485 Serial Device Server



## EKI-1524

### 4-port RS-232/422/485 Serial Device Server

- Provides 2 x 10/100 Mbps Ethernet ports for LAN redundancy
- Provides COM port redirection (Virtual COM), TCP and UDP operation modes
- Supports baud rate up to 921.6 kbps
- Provides rich configuration methods including Windows utility, Telnet console, and Web Browser
- SNMP MIB-II for network management

#### Ordering Information

- EKI-1524 4-port RS-232/422/485 Serial Device Server



## EKI-1528

### 8-port RS-232/422/485 Serial Device Server

- Provides 2 x 10/100 Mbps Ethernet ports for LAN redundancy
- Supports baud rate up to 921.6 kbps
- Provides COM port redirection (Virtual COM), TCP and UDP operation modes
- Provides rich configuration methods: Windows utility, Telnet console, Web Browser, and serial console
- SNMP MIB-II for network management

#### Ordering Information

- EKI-1528 8-port RS-232/422/485 Serial Device Server



## ADAM-4571/L

### 1-port RS-232/422/485 Serial Device Server

- Provides 10/100 Mbps auto-sensing Ethernet port
- Provides COM port redirection (Virtual COM), TCP and UDP operation modes
- Supports baud rate up to 921.6 kbps
- Allows a max. of 5 hosts to access one serial port
- Provides an easy-to-use configuration utility

#### Ordering Information

- ADAM-4571 1-port RS-232/422/485 Serial Device Server
- ADAM-4571L 1-port RS-232 Serial Device Server



## ADAM-4570/L

### 2-port RS-232/422/485 Serial Device Server

- Provides 10/100 Mbps auto-sensing Ethernet port
- Provides COM port redirection (Virtual COM), TCP and UDP operation modes
- Supports baud rate up to 921.6 kbps
- Allows a max. of 5 hosts to access one serial port
- Provides an easy-to-use configuration utility

#### Ordering Information

- ADAM-4570 2-port RS-232/422/485 Serial Device Server
- ADAM-4570L 2-port RS-232 Serial Device Server



## Accessories

#### Ordering Information

- OPT11 1 m RJ-45 to male DB9 cable
- OPT1J 30 cm RJ-45 to male DB9 cable
- OPT1A 1 m RJ-48 to male DB9 cable
- OPT1D 30 cm RJ-48 to male DB9 cable

## Modbus Gateways



### EKI-1221

#### 1-port Modbus Gateway

- Provides 2 x 10/100 Mbps Ethernet ports for LAN redundancy
- Integration of Modbus TCP and Modbus RTU/ASCII networks
- Supports up to 16 connections and 32 requests simultaneously
- Supports 31 slaves per serial port
- Auto searching slave ID over configuration utility

#### Ordering Information

- EKI-1221 1-port Modbus Gateway



### EKI-1222

#### 2-port Modbus Gateway

- Provides 2 x 10/100 Mbps Ethernet ports for LAN redundancy
- Integration of Modbus TCP and Modbus RTU/ASCII networks
- Supports up to 16 connections and 32 requests simultaneously
- Supports 31 slaves per serial port
- Auto searching slave ID over configuration utility

#### Ordering Information

- EKI-1521 2-port Modbus Gateway



### EKI-1224

#### 4-port Modbus Gateway

- Provides 2 x 10/100 Mbps Ethernet ports for LAN redundancy
- Integration of Modbus TCP and Modbus RTU/ASCII networks
- Supports up to 16 connections and 32 requests simultaneously
- Supports 31 slaves per serial port
- Auto searching slave ID over configuration utility

#### Ordering Information

- EKI-1224 4-port Modbus Gateway



### ADAM-4572

#### 1-port Modbus Gateway

- Allows up to 8 clients to access field data simultaneously
- Supports popular HMI software with Modbus/TCP driver or OPC server
- Provides auto-searching device ID Windows utility
- Automatic RS-485 data flow control
- Supports Modbus/ASCII, Modbus/RTU Protocol to control devices

#### Ordering Information

- ADAM-4572 1-port Modbus Gateway

## USB to Serial Converters



### ADAM-4561

#### 1-port Isolated USB to RS-232/422/485 Converter

- Supports 1-port 100 Mbps multimode fiber optics
- Supports 10 ~30 V<sub>DC</sub> power input
- Easily mounted on a DIN-rail, panel or piggyback
- Embedded with a switch controller, supports auto-negotiation
- Embedded with memory buffer, supports store and forward transmission

#### Ordering Information

- ADAM-4561 1-port Isolated USB to RS-232/422/485 Converter



### ADAM-4562

#### 1-port Isolated USB to RS-232 Converter

- Supports 1-port 100 Mbps single strand fiber optics
- Supports 10~30 V<sub>DC</sub> power input
- Easily mounted on a DIN-rail, panel or piggyback
- Provides 100Base-FX WDM single strand fiber
- Embedded with the memory buffer, supports store and forward transmission

#### Ordering Information

- ADAM-4562 1-port Isolated USB to RS-232 Converter



### USB-4604B

#### 4-port RS-232 Serial to USB Converter with ESD Surge Protection

- Full compliance with USB V1.1 and V2.0 specifications
- RS-232 port supported
- Transmission speed up to 921.6 kbps
- Bus-powered; no need for external power supply

#### Ordering Information

- USB-4604B 4-port RS-232 to USB Converter w/ESD



### USB-4604BM

#### 4-port Serial to USB Converter with ESD Surge Protection

- Full compliance with USB V1.1 and V2.0 specifications
- RS-232/422/485 port supported
- Transmission speed up to 921.6 kbps
- Automatic RS-485 data flow control
- Bus-powered; no need for external power supply

#### Ordering Information

- USB-4604BM 4-port RS-232/422/485 to USB Converter w/ESD

## Serial Device Server Selection Guide

Model Name	EKI-1351/1352	EKI-1521/ 1522	EKI-1524
No. of Ethernet Port	WLAN	2	2
No. of Serial Port	1/2	1/2	4
Ethernet Interface	802.11 b/g	10/100 Mbps	10/100 Mbps
Serial Type	RS-232/422/485	RS-232/422/485	RS-232/422/485
Connector	Ethernet	SMA	RJ45
	Serial	DB9	DB9
Baud Rate	50 ~ 921.6 kbps	50 ~ 921.6 kbps	50 ~ 921.6 kbps
Operating Mode	Virtual COM, Data Mode, Control Mode	Virtual COM, Data Mode, Control Mode	Virtual COM, Data Mode, Control Mode
Driver	Windows 2000/XP/Vista	Windows 2000/XP/Vista	Windows 2000/XP/Vista

Model Name	EKI-1526/1528	ADAM-4571/L	ADAM-4570/L
No. of Ethernet Port	2	1	1
No. of Serial Port	16/8	1	2
Ethernet Interface	10/100 Mbps	10/100 Mbps	10/100 Mbps
Serial Type	RS-232/422/485	ADAM-4571L: RS-232 ADAM-4571: RS-232/422/485	ADAM-4570L: RS-232 ADAM-4570: RS-232/422/485
Connector	Ethernet	RJ45	RJ45
	Serial	RJ45	RJ48
Baud Rate	50 ~ 921.6 kbps	50 ~ 921.6 kbps	50 ~ 921.6 kbps
Operating Mode	Virtual COM, Data Mode, Control Mode	ADAM-4571L: Virtual COM ADAM-4571: Virtual COM, Data Mode, Control Mode	ADAM-4570L: Virtual COM ADAM-4570: Virtual COM, Data Mode, Control Mode
Driver	Windows 2000/XP/Vista	Windows 2000/XP/Vista	Windows 2000/XP/Vista

## Modbus Gateway Selection Guide

Model Name	EKI-1221	EKI-1222	EKI-1224	ADAM-4572
No. of Ethernet Port	2	2	2	1
No. of Serial Port	1	2	4	1
Ethernet Interface	10/100 Mbps	10/100 Mbps	10/100 Mbps	10/100 Mbps
Serial Type	RS-232/422/485	RS-232/422/485	RS-232/422/485	RS-232/422/485
Connector	Ethernet	RJ45	RJ45	RJ45
	Serial	DB9	DB9	DB9
Baud Rate	50 ~ 921.6 kbps	50 ~ 921.6 kbps	50 ~ 921.6 kbps	300 ~ 115.2 kbps
Operating Mode	Modbus RTU Master/Slave, Modbus ASCII Master/Slave	Modbus RTU Master/Slave, Modbus ASCII Master/Slave	Modbus RTU Master/Slave, Modbus ASCII Master/Slave	Modbus RTU Slave, Modbus ASCII Slave
OS	Windows 2000/XP/Vista	Windows 2000/XP/Vista	Windows 2000/XP/Vista	Windows 2000/XP/Vista

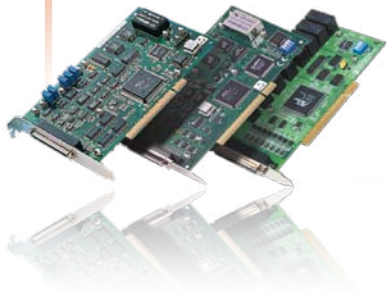
## USB to Serial Converter Selection Guide

Model Name	ADAM-4561	ADAM-4562	USB-4604B	USB-4604BM
Interface	USB 1.1	USB 1.1	USB 1.1/2.0	USB 1.1/2.0
Serial Port	1	1	4	4
Serial Type	RS-232/422/485	RS-232	RS-232	RS-232/422/485
Baud Rate	50 ~ 115.2 kbps	75 ~ 115.2 kbps	50 ~ 921.6 kbps	50 ~ 921.6 kbps
Connector	USB	Type B	Type B	Type B
	Serial	Screw terminal	DB9	DB9
Protection	Isolation	3000 V <sub>DC</sub> (RS-232/422/485)	2500 V <sub>DC</sub>	-
	Surge	3000 V <sub>DC</sub> (RS-485)	-	2500 V <sub>DC</sub>
Driver	Windows 2000/XP	Windows 2000/XP	Windows 2000/XP/2003, CE5.0	Windows 2000/XP/2003, CE5.0

# Serial Communication Cards

## Complete Line of Serial Communication Cards

Advantech's serial communication cards are designed to accommodate multiple high performance peripherals for field devices that use the RS-232/422/485 serial communication protocols. Moreover, they support up to 921.6 kbps serial speed, UARTs with 128-byte standard FIFO, various bus specifications, industrial-grade protection, and are able to fulfill diverse applications and protect against the system damages.



### PCI-1601

2-port RS-422/485 PCI Communication Card

#### Ordering Information

- PCI-1601A 2-port RS-422/485 PCI Comm Card
- PCI-1601B 2-port RS-422/485 PCI Comm Card w/EFT



### PCI-1602

2-port RS-422/485 PCI Communication Card with Isolation Protection

#### Ordering Information

- PCI-1602A 2-port RS-422/485 PCI Comm Card w/Iso
- PCI-1602B 2-port RS-422/485 PCI Comm Card w/Iso and EFT



### PCI-1603

2-port RS-232/Current-loop PCI Communication Card with Isolation Protection

#### Ordering Information

- PCI-1603 2-port Iso RS-232/current-loop PCI Comm Card



### PCI-1610 Series

4-port RS-232 PCI Communication Cards

#### Ordering Information

- PCI-1610A 4-port RS-232 PCI Comm Card (4 DB25) (30 cm DB37 to 4 x DB25 cable included)
- PCI-1610A/9 4-port RS-232 PCI (4 DB9) (30 cm DB37 to 4 x DB25 cable included)
- PCI-1610B 4-port RS-232 PCI Comm Card w/EFT, 4 x DB25 (30 cm DB37 to 4 x DB25 cable included)
- PCI-1610B/9 4-port RS-232 PCI Comm Card w/EFT, 4 x DB9 (30 cm DB37 to 4 x DB25 cable included)
- PCI-1610CU 4-port RS-232 Uni PCI Comm Card, Iso/EFT, 4 x DB25 (30 cm DB37 to 4 x DB25 cable included)
- PCI-1610CU/9 4-port RS-232 Uni PCI Comm Card, Iso/EFT, 4 x DB9



### PCI-1611U

4-port RS-422/485 Universal PCI Communication Card with Isolation & EFT Protection

#### Ordering Information

- PCI-1611U 4-port RS-422/485 Uni PCI Comm Card, 4 x DB25 (30 cm DB37 to 4 x DB25 cable included)
- PCI-1611U/9 4-port RS-422/485 Uni PCI Comm Card, 4 x DB9 (30 cm DB37 to 4 x DB25 cable included)



### PCI-1612 Series

4-port RS-232/422/485 PCI Communication Cards

#### Ordering Information

- PCI-1612A 4-port RS-232/422/485 PCI Comm, 4 x DB25 (30 cm DB37 to 4 x DB25 cable included)
- PCI-1612A/9 4-port RS-232/422/485 PCI Comm, 4 x DB9 (30 cm DB37 to 4 x DB25 cable included)
- PCI-1612B 4-port RS-232/422/485 PCI Comm w/EFT, 4 x DB25 (30 cm DB37 to 4 x DB25 cable included)
- PCI-1612B/9 4-port RS-232/422/485 PCI Comm w/EFT, 4 x DB9 (30 cm DB37 to 4 x DB25 cable included)
- PCI-1612AU 4-port RS-232/422/485 Uni PCI Comm, 4 x DB25 (30 cm DB37 to 4 x DB25 cable included)
- PCI-1612AU/9 4-port RS-232/422/485 Uni PCI Comm, 4 x DB9 (30 cm DB37 to 4 x DB25 cable included)
- PCI-1612BU 4-port RS-232/422/485 Uni PCI Comm w/EFT, 4 x DB25 (30 cm DB37 to 4 x DB25 cable included)
- PCI-1612BU/9 4-port RS-232/422/485 Uni PCI Comm w/EFT, 4 x DB9 (30 cm DB37 to 4 x DB25 cable included)
- PCI-1612CU 4-port RS-232/422/485 Uni PCI, Iso/EFT, 4 x DB25 (30 cm DB37 to 4 x DB25 cable included)
- PCI-1612CU/9 4-port RS-232/422/485 Uni PCI, Iso/EFT, 4 x DB9 (30 cm DB37 to 4 x DB25 cable included)



### PCI-1620 Series

8-port RS-232 PCI Communication Cards

#### Ordering Information

- PCI-1620A 8-port RS-232 PCI Comm Card
- PCI-1620B 8-port RS-232 PCI Comm Card w/ EFT
- PCI-1620AU 8-port RS-232 Uni PCI Comm Card
- PCI-1620BU 8-port RS-232 Uni PCI Comm w/EFT



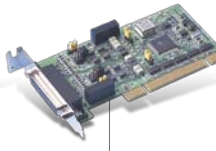
### PCI-1622CU

8-port RS-422/485 Universal PCI Communication Card with Isolation & EFT Protection

#### Ordering Information

- PCI-1622CU 8-port RS-422/485 Uni PCI Comm, Iso/EFT

## PCI-bus Low Profile Cards



### PCI-1602UP

2-port RS-422/485 Low-Profile PCI Communication Card with Isolation and EFT Protection

#### Ordering Information

- PCI-1602UP 2-port RS-422/485 Low-Profile Uni PCI Comm Card (30 cm DB25 to 2 x DB9 cable included)



### PCI-1604UP

2-port RS-232 Low-Profile PCI Communication Card with EFT Protection

#### Ordering Information

- PCI-1604UP 2-port RS-232 Low-Profile Uni PCI Comm Card (30 cm DB25 to 2 x DB9 cable included)



### PCI-1610UP/AUP

4-port RS-232 Low-Profile Universal PCI Communication Card with EFT Protection

#### Ordering Information

- PCI-1610UP 4-port RS-232 Low-Profile Uni PCI Comm w/EFT (30 cm DB44 to 4 x DB9 cable included)
- PCI-1610AUP 4-port RS-232 Low-Profile Uni PCI Comm Card (30 cm DB44 to 4 x DB9 cable included)

## CAN Communication Cards

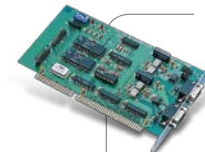


### PCI-1680U

2-port CAN-bus Universal PCI Communication Card with Isolation Protection

#### Ordering Information

- PCI-1680U 2-port CAN-bus Uni PCI COMM Card w/Iso



### PCL-841

2-port CAN-bus ISA Card with Isolation Protection

#### Ordering Information

- PCL-841 Dual-port Isolated CAN-bus Interface Card



### PCM-3680

2-port CAN-bus PC/104 Module with Isolation Protection

#### Ordering Information

- PCM-3680 Dual-port Isolated CAN Interface Module

## PC/104 Communication Cards

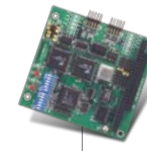


### PCM-3610

RS-232/422/485 Module with Isolation Protection

#### Ordering Information

- PCM-3610 Isolated RS-232/422/485 Module



### PCM-3612

2-port RS-422/485 Module

#### Ordering Information

- PCM-3612 Dual Port RS-422/485 Module



### PCM-3614

4-port RS-422/485 High-speed Module

#### Ordering Information

- PCM-3614 4-port RS-422/485 High-speed Module



### PCM-3618

8-port RS-422/485 High-speed Module

#### Ordering Information

- PCM-3618 8-port RS-422/485 High-Speed Module



### PCM-3640

4-port RS-232 Module

#### Ordering Information

- PCM-3640 4-port RS-232 Module



### PCM-3641

4-port RS-232 High-speed Module

#### Ordering Information

- PCM-3641 4-port RS-232 High-speed Module



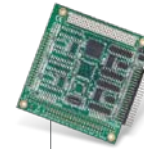
### PCM-3660

Jumperless Ethernet Module

#### Ordering Information

- PCM-3660 Jumperless Ethernet Module

## PCI-104 Communication Cards



### PCM-3614I

8-port RS-232/422/485 PCI-104 Module

#### Ordering Information

- PCM-3614I 4-port RS-232/422/485 PCI-104 Module



### PCM-3618I

8-port RS-232/422/485 PCI-104 Module

#### Ordering Information

- PCM-3618I 8-port RS-232/422/485 PCI-104 Module



### PCM-3641I

8-port RS-232 PCI-104 Module

#### Ordering Information

- PCM-3641I 4-port RS-232 PCI-104 Module



### PCM-3642I

8-port RS-232 PCI-104 Module

#### Ordering Information

- PCM-3642I 8-port RS-232 PCI-104 Module

# Serial Communication Card Selection Guide

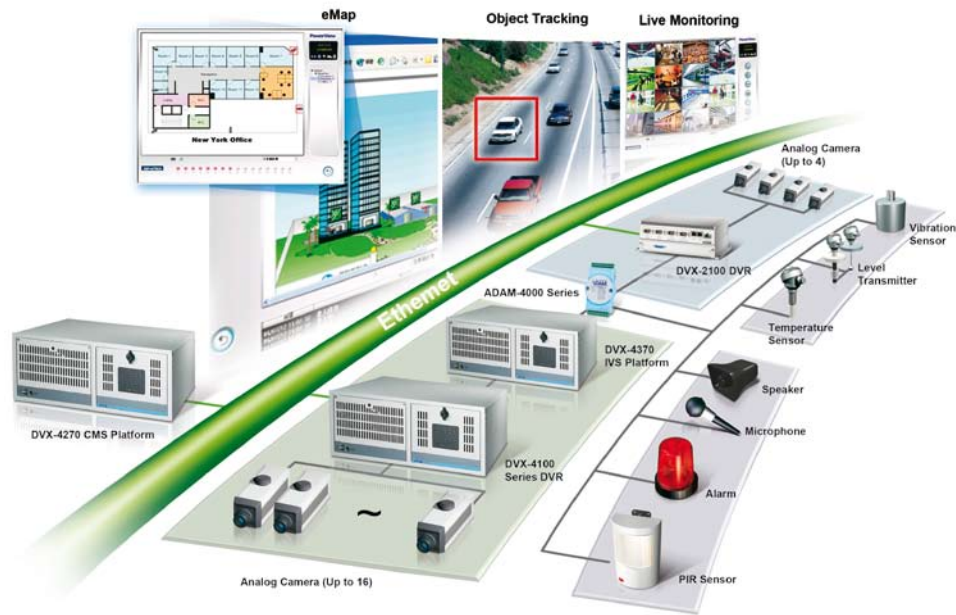
Bus	Model Name	Ports	Current Loop	Communication Interfaces				Protection		Cable Connector Type
				RS-232	RS-422	RS-485	CAN	EFT	Isolation	
Universal Low Profile PCI	PCI-1602UP	2	-		V	V	-	2500 V <sub>DC</sub>	2500 V <sub>DC</sub>	DB9 Male
	PCI-1604UP	2	-	V	-	-	-	2500 V <sub>DC</sub>	-	DB9 Male
	PCI-1610UP	4	-	V	-	-	-	2500 V <sub>DC</sub>	-	DB9 Male
	PCI-1610AUP	4	-	V	-	-	-	-	-	DB9 Male
PCI & Universal PCI	PCI-1601A	2	-	-	V	V	-	-	-	-
	PCI-1601B	2	-	-	V	V	-	2500 V <sub>DC</sub>	-	-
	PCI-1602A	2	-	-	V	V	-	-	3000 V <sub>DC</sub>	-
	PCI-1602B	2	-	-	V	V	-	2500 V <sub>DC</sub>	3000 V <sub>DC</sub>	-
	PCI-1603	2	V	V	-	-	-	-	3000 V <sub>DC</sub>	-
	PCI-1610A	4	-	V	-	-	-	-	-	DB25 Male
	PCI-1610A/9	4	-	V	-	-	-	-	-	DB9 Male
	PCI-1610B	4	-	V	-	-	-	3000 V <sub>DC</sub>	-	DB25 Male
	PCI-1610B/9	4	-	V	-	-	-	3000 V <sub>DC</sub>	-	DB9 Male
	PCI-1610CU	4	-	V	-	-	-	2500 V <sub>DC</sub>	2500 V <sub>DC</sub>	DB25 Male
	PCI-1610CU/9	4	-	V	-	-	-	2500 V <sub>DC</sub>	2500 V <sub>DC</sub>	DB9 Male
	PCI-1611U	4	-	-	V	V	-	2500 V <sub>DC</sub>	2500 V <sub>DC</sub>	DB25 Male
	PCI-1611U/9	4	-	-	V	V	-	2500 V <sub>DC</sub>	2500 V <sub>DC</sub>	DB9 Male
	PCI-1612A	4	-	V	V	V	-	-	-	DB25 Male
	PCI-1612A/9	4	-	V	V	V	-	-	-	DB9 Male
	PCI-1612B	4	-	V	V	V	-	2500 V <sub>DC</sub>	-	DB25 Male
	PCI-1612B/9	4	-	V	V	V	-	2500 V <sub>DC</sub>	-	DB9 Male
	PCI-1612AU	4	-	V	V	V	-	-	-	DB25 Male
	PCI-1612AU/9	4	-	V	V	V	-	-	-	DB9 Male
	PCI-1612BU	4	-	V	V	V	-	2500 V <sub>DC</sub>	-	DB25 Male
	PCI-1612BU/9	4	-	V	V	V	-	2500 V <sub>DC</sub>	-	DB9 Male
	PCI-1612CU	4	-	V	V	V	-	2500 V <sub>DC</sub>	2500 V <sub>DC</sub>	DB25 Male
	PCI-1612CU/9	4	-	V	V	V	-	2500 V <sub>DC</sub>	2500 V <sub>DC</sub>	DB9 Male
	PCI-1620A	8	-	V	-	-	-	-	-	Optional
	PCI-1620B	8	-	V	-	-	-	3000 V <sub>DC</sub>	-	Optional
	PCI-1620AU	8	-	V	-	-	-	-	-	Optional
	PCI-1620BU	8	-	V	-	-	-	2500 V <sub>DC</sub>	-	Optional
	PCI-1622CU	8	-	-	V	V	-	2500 V <sub>DC</sub>	2500 V <sub>DC</sub>	Optional
	PCI-1680U	2	-	-	-	-	V	-	2500 V <sub>DC</sub>	-

Bus	Model Name	Ports	Communication Interfaces				Protection		Cable Connector Type
			RS-232	RS-422	RS-485	CAN	EFT	Isolation	
ISA	PCL-841	2	-	-	-	V	-	1000 V <sub>DC</sub>	-
PCI/104	PCM-3610	2	V	V	V	-	-	1000 V <sub>DC</sub>	-
	PCM-3612	2	-	V	V	-	-	-	-
	PCM-3680	2	-	-	-	V	-	1000 V <sub>DC</sub>	-
	PCM-3614	4	-	V	V	-	1000 V <sub>DC</sub>	-	-
	PCM-3640	4	V	-	-	-	-	-	-
	PCM-3641	4	V	-	-	-	-	-	-
	PCM-3618	8	-	V	V	-	1000 V <sub>DC</sub>	-	-
PCI-104	PCM-3614I	4	V	V	V	-	-	-	-
	PCM-3618I	8	V	V	V	-	-	-	-
	PCM-3641I	4	V	-	-	-	-	-	-
	PCM-3642I	8	V	-	-	-	-	-	-

## Accessories

Model Name	Connectors Side 1	Connectors Side 2	Length	Type	Use With
OPT8AP	1 x DB62 Male	8 x DB25 Female	1.5 m	Connection Box	PCI-1620A/B/AU/BU PCI-1625U PCL-844+ PCL-858A/B
OPT8BP	1 x DB62 Male	8 x DB25 Male	1.5 m	Connection Box	
OPT8C	1 x DB62 Male	8 x DB25 Male	1 m	Cable	
OPT8H	1 x DB62 Male	8 x DB9 Male	1 m	Cable	
OPT8I	1 x DB78 Male	8 x DB25 Male	1 m	Cable	
OPT8J	1 x DB78 Male	8 x DB9 Male	1 m	Cable	PCI-1622CU

# Industrial Video Surveillance Overview



## Product & Solution Overview

In the video surveillance market, most vendors provide standalone DVRs that only offer live video and recording functions. However, video monitoring alone can't satisfy the rigorous needs of the industrial automation sector. Advantech offers innovative video solutions with advanced functionality to fulfill these needs. Advantech's sophisticated knowledge already serves government, transportation, factory and environmental monitoring applications. To satisfy additional automation applications, Advantech offers DVX-4100 Series DVR with Information On-Screen, DVX-4270 CMS (Central Monitoring System), and DVX- 4370 IVS (Intelligent Video System). DVX-4000 series application-ready platforms and PV series video capture cards that are bundled with PowerView software for fulfilling rigorous security demands, while DVP series capture cards with SDKs for easy customization.

# PowerView Software

## Advanced Digital Surveillance Software



PowerView is a complete advanced digital surveillance system to meet the requirements of modern security. Quality compression, improved image quality, as well as real-time video, audio, and monitoring, make it a dependable first choice for professionals needing continuous 24 hours a day operations in large networks with centralized control. PowerView 6000 can be integrated with Power Center Professional, Backup Center, Video Integration System and other access control systems.



### PowerView 6000

To satisfy the critical demand of dangerous area monitoring, Advantech has developed a fully integrated system we called "Information-enabled DVR Solution" to penetrate automation application market. With the combination of video image and data information, Information such as temperature, pressure, PH value, flow rate can be monitored by sensors connected to ADAM-4000 series module via ModBUS/RTU. Advantech's FA solution not only meets the needs of video surveillance & equipment monitoring, but also saves money on video with I/O system purchasing.



### PowerView IVS

Video content analysis and intelligent video object behavior analysis assist security guards in making judgments and assessing threats. Advantech's PowerView IVS (Intelligent Video System) helps users manage emergency cases and be aware of illegal events while they are happening. Users can easily identify and monitor objects, areas, vehicles, people, animals, goods and more. Our IVS solution offer following intelligent video functions:

- Unattended object analysis
- Lost object analysis
- People loitering
- Virtual fence detection
- Car and people counting
- Vehicle wrong direction



### PowerView CMS

PowerView CMS (Central Monitoring System) is a complete advanced central monitoring and administration software package for video security applications. It is designed for versatility and integration with DVR to enhance its security integrity. Therefore administrator and authorized clients can easily monitor and control the activities and security of their respected settings and playback recorded data just with a click on PowerView CMS.

## Industrial Video Surveillance Solutions



### Video Surveillance with Information On-Screen and Intelligent Video Analysis

Advantech DVX-4170 DVR with Information On-Screen provides valuable real-time field data and video with integrated SCADA HMI & I/O information. DVX-4270 CMS supports a triple screen display to simultaneously view live video, eMaps, and event lists for efficient central monitoring. DVX-4370 IVS with intelligent video analytics can automatically detect, analyze, and classify objects and people behaviors. Further, Advantech's video capture cards provide a variety of interfaces to satisfy applications for multiple platforms.

## Digital Video Surveillance Platforms



### DVX-4170

#### 16-ch Information-enabled DVR Systems

- MPEG-4/H.264 software/hardware compression
- 16-ch video inputs
- 4 x hot swap HDD bays providing up to 4TB HDD capacity
- Quick & smart searches by calendar/time segment and IVS functions

#### Ordering Information

- DVX-4170-H16AE 16-ch H.264 DVR with 4 HDD Swaps
- DVX-4170-M16AE 16-ch MPEG-4 DVR with 4 HDD Swaps



### DVX-4270

#### Video Surveillance Central Monitoring System

- Supports dual-monitor displays
- Ability to watch 128 cameras
- Remote PTZ control via internet and remote playback & set up
- Intelligent eMap function

#### Ordering Information

- DVX-4270-AE Video Surveillance Central Monitoring System



### DVX-4370

#### Intelligent Video System

- Object Tracking: unattended object, virtual fence, loitering and object counting
- Supports smart search function in DVX-4170
- Analyze and detect behavior at live video frames
- Connection with DVR through Ethernet

#### Ordering Information

- DVX-4370-AE Intelligent Video System

## Video Capture Cards

### PCI-104 Video Capture Cards with H.264/MPEG-4 Hardware Compression



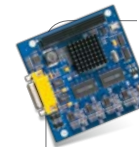
### DVP-2420E

#### 2-ch PCI-104 MPEG-1/2/4 Video Capture Module with SDK

- 2 channel composite inputs with MPEG-1/2/4 hardware compression
- Supports MPEG1 Layer II audio compression
- SDK supports Windows® XP/XPe/Windows 2000 with VC++ sample codes

#### Ordering Information

- DVP-2420E 2-ch PCI-104 MPEG-1/2/4 Video Capture Module w/SDK



### DVP-2124PV

#### 4-ch Real-Time PCI-104 H.264 Video Capture Module with PowerView

- 4 channel composite inputs with H.264 compression
- 120/100 fps (NTSC/PAL) at D1 resolution for recording and display
- Bundled with PowerView 6000 advanced surveillance software

#### Ordering Information

- DVP-2124PV-AE 4-ch PCI-104 H.264 Video Capture Module w/ PowerView

### PCI Video Capture Cards with H.264/MPEG-4 Hardware Compression



### PV-2000E

#### 4-ch Real-Time H.264 Video Capture Card with PowerView

- 4 channel composite inputs with H.264 compression
- Able to mix PV-2000E with PV-2100E card stacks for up to 32 channels per PC
- 120/100 fps (NTSC/PAL) at D1 resolution for recording and display
- Bundled with PowerView 6000 advanced surveillance software

#### Ordering Information

- PV-2000E 4-ch Real-Time H.264 Video Capture Card w/PowerView



### PV-2100E

#### 8-ch Real-Time H.264 Video Capture Card with PowerView

- 8 channel composite inputs with H.264 compression
- Able to mix PV-2000E with PV-2100E card stacks for up to 32 channels per PC
- 240/200 fps (NTSC/PAL) at D1 resolution for recording and display
- Bundled with PowerView 6000 advanced surveillance software

#### Ordering Information

- PV-2100E 8-ch Real-Time H.264 Video Capture Card w/PowerView



## DVP-7421BE

### 4-ch Real-Time MPEG-1/2/4 Video Capture Card with SDK

- 4 channel composite inputs with MPEG-1/2/4 hardware compression
- Able to interconnect 4 DVP-7421BE for up to 16 channels per PC
- 120/100 fps (NTSC/PAL) at D1 resolution for recording and display
- SDK supports Windows® XP/XPe/Windows 2000 with VC++ sample codes

#### Ordering Information

- DVP-7421BE 4-ch MPEG-1/2/4 Video Capture Card w/ SDK



## DVP-7010BE

### 4-ch MPEG-4 Video Capture Card with SDK

- 4 channel composite inputs with MPEG-4 compression
- Able to mix DVP-7010BE with DVP-7020BE card stacks for up to 24 channels per PC
- 30/25 fps (NTSC/PAL) at CIF resolution for recording and display
- SDK supports Windows XP/XPe/Windows 2000 with VC++ sample codes

#### Ordering Information

- DVP-7010BE 4-ch MPEG-4 Video Capture Card w/ SDK

## USB Video Capture Card with MPEG-4 Hardware Compression



## DVP-1412E

### 1-ch USB MPEG-4 Video Capture Module with SDK

- 1 channel composite input with MPEG-4 hardware compression
- Full-motion video/audio encoding up to D1 resolution at 30/25 fps
- SDK supports Windows XP/XPe/Windows 2000 with VC++ sample codes

#### Ordering Information

- DVP-1412E 1-ch USB MPEG-4 Video Capture Module w/ SDK



## DVP-7020BE

### 16-ch MPEG-4 Video Capture Card with SDK

- 16 channel composite inputs with MPEG-4 compression
- Able to mix DVP-7010BE with DVP-7020BE card stacks for up to 24 channels per PC
- 120/100 fps (NTSC/PAL) at CIF resolution for recording and display
- SDK supports Windows XP/XPe/Windows 2000 with VC++ sample codes

#### Ordering Information

- DVP-7020BE 16-ch MPEG-4 Video Capture Card w/ SDK

## PCI Video Capture Cards with MPEG-4 Software Compression



## PV-600E/800E

### 4-ch MPEG-4 Video Capture Card with PowerView

### 16-ch MPEG-4 Video Capture Card with PowerView

- 4 or 16 channel composite inputs with MPEG-4 compression
- Able to mix PV-600E with PV-800E card stacks for up to 24 channels per PC
- 30/25 fps (PV-600E), 120/100 fps (PV-800E) at CIF resolution for recording and display
- Bundled with PowerView 6000 advanced surveillance software

#### Ordering Information

- PV-600E 4-ch MPEG-4 Video Capture Card w/ PowerView
- PV-800E 16-ch MPEG-4 Video Capture Card w/ PowerView



## DVP-7024

### 4-ch Real-Time MPEG-4 Video Capture Card

- 4 channel composite inputs with MPEG-4 compression
- 120/100 fps (NTSC/PAL) for recording and display
- SDK supports Windows XP/Windows 2000 with VC++ sample codes
- Supports PowerView 6000 advanced surveillance software

#### Ordering Information

- DVP-7024-AE 4-ch Real-Time MPEG-4 Video Capture Card w/ SDK



## PV-1000E

### 16-ch Real-Time MPEG-4 Video Capture Card with PowerView

- 16 channel composite inputs with MPEG-4 compression
- 480/400 fps (NTSC/PAL) at CIF resolution for recording and display
- Bundled with PowerView 6000 advanced surveillance software
- Supports ADAM-4055 8DI/8DO module

#### Ordering Information

- PV-1000E 16-ch Real-Time MPEG-4 Video Capture Card w/ PowerView



## DVP-7026

### 16-ch Real-Time MPEG-4 Video Capture Card

- 16 channel composite inputs with MPEG-4 compression
- 480/400 fps (NTSC/PAL) for recording and display
- SDK supports Windows XP/Windows 2000 with VC++ sample codes
- Supports PowerView 6000 advanced surveillance software

#### Ordering Information

- DVP-7026-AE 16-ch Real-Time MPEG-4 Video Capture Card w/ SDK

## Video Capture Card Selection Guide

Model	PV-600E	PV-800E	PV-1000E	PV-2000E	PV-2100E	DVP-7421BE	
<b>Description</b>	4-ch MPEG-4 Video Card with PowerView	16-ch MPEG-4 Video Card with PowerView	16-ch Real-Time MPEG-4 Video Card with PowerView	4-ch Real-Time H.264 Video Card with PowerView	8-ch Real-Time H.264 Video Card with PowerView	4-ch Real-Time MPEG-1/2/4 Video Card with SDK	
<b>Bus</b>	PCI v2.2	PCI v2.2	PCI v2.2	PCI v2.2	PCI v2.2	PCI v2.2	
<b>Video</b>	<b>Video Input</b>	4	16	16	4	8	4
	<b>Resolution (Max.)</b>	D1	D1	D1	D1	D1	D1
	<b>Recording Rate (NTSC/ PAL)</b>	30/25 fps	120/100 fps	480/400 fps	120/100 fps	240/200 fps	120/100 fps
	<b>Display Rate (NTSC/ PAL)</b>	30/25 fps	120/100 fps	480/400 fps	120/100 fps	240/200 fps	120/100 fps
	<b>Video Compression</b>	MPEG-4	MPEG-4	MPEG-4	H.264	H.264	MPEG-1/2/4
	<b>Video Output</b>	-	-	-	-	-	V
<b>Audio</b>	<b>Audio Input</b>	-	-	16	4	8	4
	<b>Audio Output</b>	-	-	1	1	1	1
<b>Physical Characteristics</b>	<b>Operating Temperature</b>	-10 ~ 60°C (14 ~ 140°F)	-10 ~ 60°C (14 ~ 140°F)	-10 ~ 60°C (14 ~ 140°F)	-10 ~ 60°C (14 ~ 140°F)	-10 ~ 60°C (14 ~ 140°F)	-10 ~ 60°C (14 ~ 140°F)
	<b>Dimensions</b>	125.38 x 97.25 mm (4.87" x 3.82")	125.38 x 97.25 mm (4.87" x 3.82")	162 x 106 mm (6.3" x 4.2")	154 x 94 mm (6.0" x 3.7")	200 x 108 mm (7.9" x 4.3")	182.6 x 106.9 mm (7.2" x 4.2")
<b>Windows 2000/XP DLL Driver</b>	-	-	-	-	-	V	
<b>Demo Program with VC++ Sample Code</b>	-	-	-	-	-	V	
<b>PowerView 6000 Surveillance Software</b>	V	V	V	V	V	-	

### Supported Digital I/O Modules:

- ADAM-4050
- ADAM-4051
- ADAM-4052
- ADAM-4053
- ADAM-4055
- ADAM-4056S
- ADAM-4060
- ADAM-4068
- PCI-1730
- PCI-1733
- PCI-1743
- PCI-1761

DVP-7010BE	DVP-7020BE	DVP-7024	DVP-7026	DVP-2420E	DVP-2124PV	DVP-1412E
4-ch MPEG-4 Video Card with SDK	16-ch MPEG-4 Video Card with SDK	4-ch Real-Time MPEG-4 Video Capture Card with SDK	16-ch Real-Time MPEG-4 Video Capture Card with SDK	2-ch PCI-104 MPEG-1/2/4 Video Capture Module with SDK	4-ch Real-Time PCI-104 H.264 Video Capture Module with PowerView	1-ch USB MPEG-4 Video Capture Module with SDK
PCI v2.2	PCI v2.2	PCI v2.2	PCI v2.2	PCI-104	PCI-104	USB 2.0
4	16	4	16	2	4	1
D1	D1	D1	D1	D1	D1	D1
30/25 fps	120/100 fps	120/100 fps	480/400 fps	60/50 fps	120/100 fps	30/25 fps
30/25 fps	120/100 fps	120/100 fps	480/400 fps	60/50	120/100 fps	30/25 fps
MPEG-4	MPEG-4	MPEG-4	MPEG-4	MPEG-1/2/4	H.264	MPEG-4
-	-	-	V	V	-	V
-	-	4	16	2	4	1
-	-	-	-	1	-	-
-10 ~ 60°C (14 ~ 140°F)	-10 ~ 60°C (14 ~ 140°F)	-10 ~ 60°C (14 ~ 140°F)	-10 ~ 60°C (14 ~ 140°F)	-10 ~ 60°C (14 ~ 140°F)	-10 ~ 60°C (14 ~ 140°F)	-10 ~ 60°C (14 ~ 140°F)
125.38 x 97.25 mm (4.87" x 3.82")	125.38 x 97.25 mm (4.87" x 3.82")	162 x 106 mm (6.3" x 4.2")	200 x 108 mm (7.9" x 4.3")	95.88 x 90.17 mm (3.77" x 3.55")	95.88 x 90.17 mm (3.77" x 3.55")	70 x 38 mm (2.75" x 1.49")
V	V	V	V	V	-	V
V	V	V	V	V	-	V
-	-	-	-	-	V	-