

Smart city

Cloud Network Management System

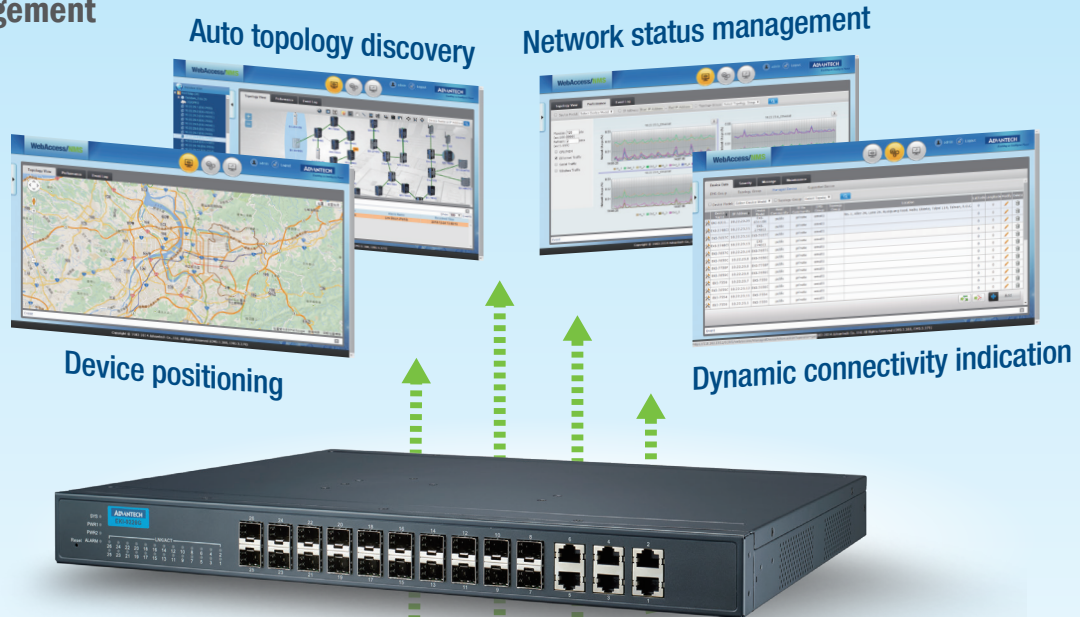
Cloud Management System for Predictive Maintenance and Optimize Operation

Edge Solution Ready Package

ESRP-CMS-EKI9226



- Predictive Maintenance
- Google Map Positioning
- Auto Topology Discovery
- Cloud Management



ESERP-CMS-EKI9226

Police Agency



Operation Agency



Traffic Agency



Fire Control Agency



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WebAccess/NMS

Cloud Network Management System

ESRP-CMS-EKI9226



Predictive Maintenance.

With the Cloud Network Management System, users can easily receive information, such as connection change records, alarm history, device downtime, and initial time, to help users take efficient predictive action and plan for system maintenance.



Google Map Positioning

Users can define the longitude and latitude of the device and its topological group. WebAccess/NMS can then locate the position on the Google Maps and OpenStreetMap. The actual locations and connections are clearly presented on the map. It benefits medium-to large-scale application deployment and management.



Auto Topology Discovery

Find out all the network devices by using the auto topology discovery function and easily manage network devices intuitively. Features include dynamic connectivity indication (wired, wireless, PoE, etc.) and logical topology view (under IGMP, VLAN, etc.).



Cloud Management

The system supports HTML5-based remote desktop functions. A web-based remote desktop extends management flexibility for system administrators using a PC-based device. It also supports alarm playback, which allows users to replay historical traps or events with a topology diagram, thus helping to identify the health of network devices, cables, settings, and edge devices.

Platform	EKI-9226G-20FOI	EKI-9226G-20FMI
Port Number	26	26
RJ45 Port Interface	6 x 10/100/1000Base-T(X)	6 x 10/100/1000Base-T(X)
Fiber Port Interface	20 x 100/1000 Mbps SFP	20 x 100/1000 Mbps SFP
Standard	IEEE 802.3, 802.3u, 802.3x, 802.3z, 802.1D, 802.1w, 802.1p, 802.1Q, 802.1X, 802.3ad, 802.3ab	
Software feature	VLAN, IGMP, X-Ring, IEEE 1588v2 (PTP), DHCP etc.	VLAN, IGMP, X-Ring, IEEE 1588v2 (PTP), DHCP etc.
Mounting	19 inch Rackmount	19 inch Rackmount
Operating Temperature	-40 ~ 70°C (-40 ~ 158°F)	-40 ~ 70°C (-40 ~ 158°F)
Relative Humidity (Non-condensing)	10 ~ 95%	10 ~ 95%
Power Input	Dual 100~240Vac	Dual 48Vdc
Connectors	2 x 3-pin removable screw terminal (power) 1 x 4-pin removable screw terminal (relay)	
Reverse Polarity	Present	Present
Safety	UL 60950	UL 60950
EMI	CE, FCC Class A	CE, FCC Class A
Vertical Market	IEC 61850-3	IEC 61850-3
EMC	EN 61000-4-2 , EN 61000-4-3 , EN 61000-4-4 , EN 61000-4-5 , EN 61000-4-6 , EN 61000-4-8	
Shock	IEC 60068-2-27	IEC 60068-2-27
Freefall	IEC 60068-2-32	IEC 60068-2-32
Vibration	IEC 60068-2-6	IEC 60068-2-6
Warranty Period	5 years	5 years

Ordering Information

ESRP-CMS-EKI9226

Industrial Rackmount L2 Managed Fiber Switch with cloud network management system.

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Network Security Pack

Efficient Cyber Security Guard from Network Edge

Edge Solution
Ready Package

ESRP-CSS-EKI7712



- Efficient Anti-Intrusion from the Network Edge
- Protect Manufacturing Assets against Cyber Attack
- Prevent DDoS Attacks and Packet Flooding
- MAC and IP Policy Security



ESRP-CSS-EKI7712

Network Security Pack

ESRP-CSS-EKI7712



Efficient Anti-Intrusion from the Network Edge

Advantech's Network Security Pack is the first line of defense and a gatekeeper to defend user networks, preventing illegal, malicious, and fallacious packets from entering the network.



Protect Manufacturing Assets against Cyber Attack

Advantech provides a rugged hardware design with high reliability. With this security pack, users can improve system-wide reliability so that assets can be protected in a safe environment.



Prevent DDoS Attacks and Packet Flooding

The Network Security Pack support DDoS attack prevention and IP security functions to helping prevent the system from being attacked or paralyzed by DDoS and packet flooding.



MAC and IP Policy Security

The security pack acts as a security guard to protect networks based on MAC & IP policy.

Platform	EKI-7712G-4GPI
Port Number	12
RJ45 Port Interface	8 x 10/100/1000Base-T(X)
Fiber Port Interface	4 x 100/1000 Mbps SFP
Power Budget	240W
Standard	"IEEE 802.3, 802.3u, 802.3x, 802.3z, 802.1D, 802.1w,802.1p, 802.1Q, 802.1X, 802.3ad, 802.3ab"
Software feature	Security Pack, VLAN, IGMP, X-Ring, QoS, DHCP, IXM etc.
Mounting	DIN-Rail
Operating Temperature	-40 ~ 75°C (-40 ~ 167°F)
Relative Humidity (Non-condensing)	10 ~ 95%
Power Input	Dual 46~57Vdc
Reverse Polarity	Present
Safety	UL 61010
EMI	CE, FCC Class A
Vertical Market	EN50121-4, NEMA TS2
EMC	EN 61000-4-2 , EN 61000-4-3 , EN 61000-4-4 , EN 61000-4-5 , EN 61000-4-6 , EN 61000-4-8
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-32
Vibration	IEC 60068-2-6
Warranty Period	5 years

Ordering Information

ESRP-CSS-EKI7712

8GE PoE+4G SFP L2 Managed Ethernet Switch built-in with Cyber security system.

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LoRaWAN Gateway with MQTT and Node-RED

Low-Power Wide Area Network for Wireless Communication

Edge Solution Ready Package

ESRP-CMS-WISE6610



- Long-Distance Wireless Data Transmission and Third-Party LoRaWAN Node Device Compliant
- Embedded Network Server and Node-RED, Bundle a Lightweight IoT Protocol MQTT
- LoRaWAN Gateway Backup Function



Weather station



Environment and energy



ESRP-CMS-WISE6610



Agriculture

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LoRaWAN Gateway with MQTT and Node-RED

ESRP-CMS-WISE6610

✓ Long-Distance Wireless Data Transmission and Third-Party LoRaWAN Node Device Compliant

The WISE-6610 LoRaWAN gateway enables long-distance wireless data transmission with low power consumption. It reduces the cost of infrastructure investment and fulfills the deployment needs to wide area wireless products.

✓ Embedded Network Server and Node-RED, Bundle a Lightweight IoT Protocol MQTT

The WISE-6610 supports data decryption through an embedded network server. With a high level of security, collected data are delivered to a data server for storage and analysis. With MQTT and Node-RED supported, the WISE-6610 provides data visualization functionality. The standard MQTT protocol and Node-RED can be utilized to visualize target data.

✓ LoRaWAN Gateway Backup Function

Valuable software that makes backup feasible in the WISE-6610. It makes the entire network system robust and provides highly reliable LoRaWAN wireless network infrastructure. Installing two WISE-6610 gateways allows for redundancy functionality. The primary gateway is responsible for all data transmission while the secondary device is on standby and in sync with the network server data with the primary device. If the primary device becomes unavailable, the secondary device will take over automatically to continue transmitting data.

Platform	WISE-6610
Port Number	1
RJ45 Port Interface	10/100 Mbps
Compatibility	LoRaWAN
Frequency	868/915/923MHz
Antenna Connector	SMA Female
No. of Antenna	1
Wireless Security	HTTPS, SSH, VPN tunnels, SFTP, DMZ, Firewall (IP Filtering, MAC address filtering, Inbound and outbound Port filtering)
VPN tunnelling	Open VPN client and server and P2P, L2TP, PPTP, GRE, EasyVPN, IPSec with IKEv1 and IKEv2
Configuration	SSH, Web Browser
Network and Routing	DHCP Server, NAT/PAT, VRRP, Dynamic DNS client, DNS proxy, VLAN, QoS, DMVPN, NTP Client/Server, IGMP, BGP, OSPF, RIP, SMTP, SMTPS, SNMP v1/v2c/ v3, Backup Routers, PPP, PPPoE, SSL, Port Forwarding, Host Port Routing, Ethernet Bridging, Network Server
Enclosure	Metal
Mounting	DIN-rail, Wall
Dimensions (W x H x D)	150 x 30 x 83 mm (5.9" x 1.18" x 3.27")
Operating Temperature	-40 ~ 75 °C
Storage Temperature	-40 ~ 80°C (-4 ~ 176°F)
Power Input	9 ~ 36 V _{DC}
Power Connector	4-Way Molex mini-fit connector

Ordering Information

ESRP-CMS-WISE6610

LoRaWAN package supports up to 100/500 nodes, with 868/915/923 Mhz

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Zero-Touch Mass Router Deployment System

Advantech Router and Gateway Remote Management, Monitoring and Provisioning Platform

ESRP-CMS-SR304



Edge Solution Ready Package

- Cellular Router with Remote Management and Monitoring Feature
- Zero Touch Provisioning
- Device Configuration, Diagnostics & Management Platform
- Multi-Tenancy Support



Device Configuration



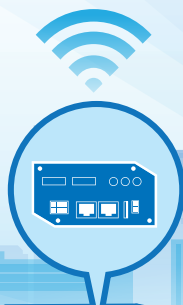
Configuration Profiles



Edge intelligence Delivery



Network Monitoring



MQTT
RESTful APIs

ESRP-CMS-SR304

Zero-Touch Mass Router Deployment System

ESRP-CMS-SR304



Cellular Router with Remote Management and Monitoring Feature

The router bridges your office with your field site where no Ethernet infrastructure is available. It easily connects your remote devices via a 3G/LTE network and updates the historical network status for remote diagnostics purposes.



Zero Touch Provisioning

The zero-touch router deployment system saves users time and resources immediately after router installation. When a new, unconfigured router is installed and powered on, it can automatically download the initial configuration and application code from a central server. This means that new units can be installed by electrical contractors who have no specialist knowledge. Thus, it can be installed at any time without specialist engineers.



Device Configuration, Diagnostics & Management Platform

The system allows users to remotely monitor and manage routers from any location. Simultaneous upgrades and configuration changes can also be applied remotely to individual routers or groups of routers. In fact, all routers on a network can be upgraded or reconfigured at the same time.



Multi-Tenancy Support

To manage network routers systematically, the single-instance installation allows users to provide separate tenant accounts for device provisioning.

Platform	BB-SR304
WAN Type	GPRS/UMTS/HSPA+/LTE
	Ethernet WAN
Port Number	2/3/5
SIM	2
Storage	USB/Sdcard
Wi-Fi	802.11a, 802.11b, 802.11g, 802.11n
Serial COM port	232/422/485
I/O	YES
PoE	Optional
GPS Receiver	by model
Platform	Linux
Enhanced software development	script/user module
VPN support	IPSec, OpenVPN, PPTP, L2TP, GRE
Security	HTTPS, SSH, VPN tunnels, SFTP, Firewall (IP Filtering, MAC address filtering, Inbound and outbound Port filtering), DMZ (via iptables)
Network and Routing	DHCP Server, NAT/PAT, VRRP, Dynamic DNS client, DNS proxy, VLAN, QoS, DMVPN, NTP Client/ Server, IGMP, BGP, OSPF, RIP, SMTP, SMTPS, SNMP v1/ v2c/ v3, Backup Routers, PPP, PPPoE, SSL, Port Forwarding, Host Port Routing, Ethernet Bridging
Configuration	Web server, SSH, Four configuration switchable profiles, Automatic configuration update from server, Backup configuration, Restore configuration
Device Management Tool	WebAccess/DMP

Ordering Information

ESRP-CMS-SR304

Industrial Cellular Router with WEBACCESS/DMP Management and Provisioning Tool

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Cellular Connection and Protocol Conversion for Smart Metering

IEC 101/104 Protocol Conversion and Remote Management Platform



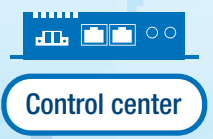
Edge Solution Ready Package

ESRP-PCS-ICR3231

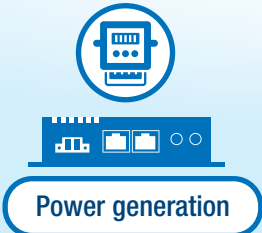
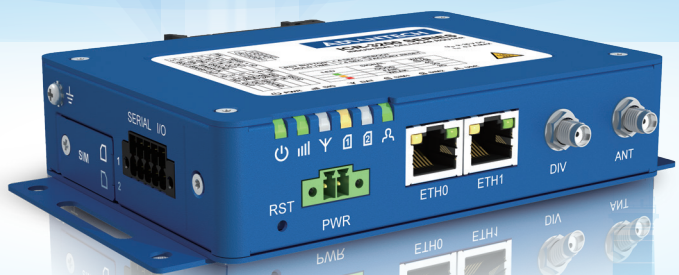
- Cellular Routers or Gateways Provide Secure Internet Connectivity for Devices and LANs via a Cellular Network
- Managing and Monitoring Substations using the IEC 60870-5 Communication Protocol
- Provides Bidirectional Conversion Between IEC101 and IEC104 Protocols

IEC 60870-5-104

IEC 60870-5-101



ESRP-PCS-ICR3231



Enabling an Intelligent Planet

Cellular Connection and Protocol Conversion for Smart Metering

ESRP-PCS-ICR3231

✓ Cellular Routers or Gateways Provide Secure Internet Connectivity for Devices and LANs via a Cellular Network

The Remote Management and Diagnostic Gateway provides automatic wireless failover for wired networks and supports real-time data encryption in addition to the creation of VPN tunnels, which enhance data security.

✓ Managing and Monitoring Substations using the IEC 60870-5 Communication Protocol

The gateway connects substations to control rooms via TCP/IP and Ethernet with the IEC 60870-5-104 protocol, allowing the service of multiple devices during operation, significantly reducing costs compared to when leased serial lines are employed on the LAN side of a substation to connect RTUs using the IEC 870-5-101 protocol.

✓ Provides Bidirectional Conversion Between IEC101 and IEC104 Protocols

The gateway enables fast and cost efficient coupling between control stations and SCADA systems using the IEC 60870-5-101 and IEC 60870-5-104 communication standards. It also derives benefits from extensive protocol compatibility at the application level.

P/N	ESRP-PCS-ICR3232
WAN Type	GPRS/UMTS/HSPA+/LTE Ethernet WAN
number of 10/100 ETH port	2
SIM	2
Storage	None
Wi-Fi	2x MIMO, 802.11a, 802.11b, 802.11g, 802.11n, 802.11ac
Serial COM port	232/485
I/O	YES
PoE	None
GPS Receiver	by model
Platform	Linux
Enhanced software development	script/user module
VPN support	IPSec, OpenVPN, PPTP, L2TP, GRE
Security	HTTPS, SSH, VPN tunnels, SFTP, DMZ, Firewall (IP Filtering, MAC address filtering, Inbound and outbound Port filtering)
Network and Routing	DHCP Server, NAT/PAT, VRRP, Dynamic DNS client, DNS proxy, VLAN, QoS, DMVPN, NTP Client/ Server, IGMP, BGP, OSPF, RIP, SMTP, SMTPS, SNMP v1/ v2c/ v3, Backup Routers, PPP, PPPoE, SSL, Port Forwarding, Host Port Routing, Ethernet Bridging
Configuration	Web server, SSH, Four configuration switchable profiles, Automatic configuration update from server, Backup configuration, Restore configuration
Device Management Tool	WebAccess/DMP

Ordering Information

ESRP-PCS-ICR3231

Industrial Cellular Router with IEC 101/104 Protocol conversion software

OPC UA Suites and Protocol Conversion Gateway

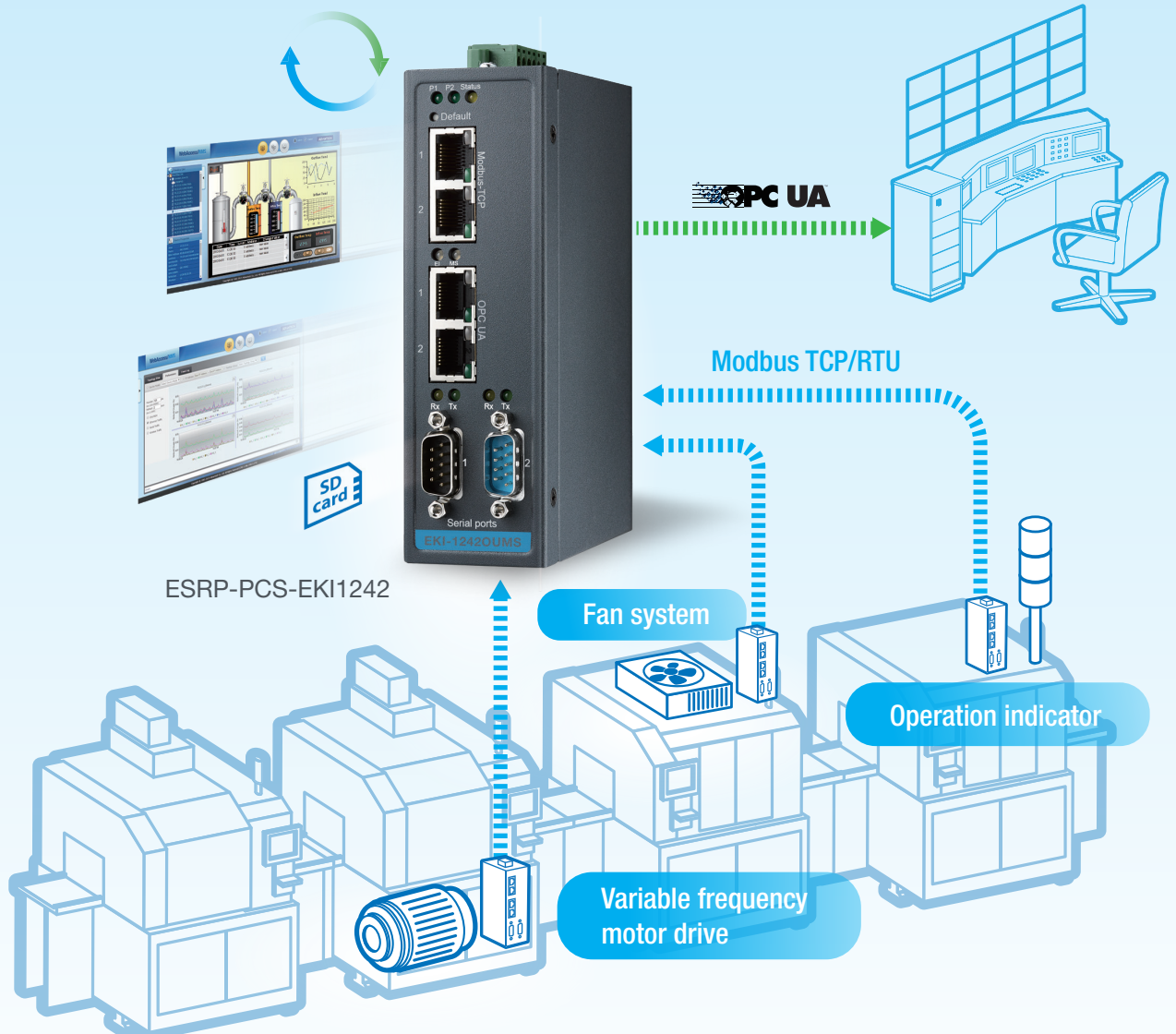
Fieldbus and Industrial Ethernet Interconnection in OPC UA Environment



Edge Solution Ready Package

ESRP-PCS-EKI1242

- Seamless Integration for Your Industrial Environment
- Cost-Effective Solution
- Easy to Use and Maintain



OPC UA Suites and Protocol Conversion Gateway

ESRP-PCS-EKI1242



Seamless Integration for Your Industrial Environment

Allows legacy device deployment in OPC UA environments as well as seamless communication between Fieldbus and Industrial Ethernet devices.



Cost-Effective Solution

By converting one protocol to another, it allows for legacy device communication, avoiding the need to purchase extra devices while also minimizing the risk of software programming errors.



Easy to Use and Maintain

Auto protocol conversion design for easy configuration. Saves time for backup and restore task because it supports MicroSD card.

Platform	EKI-1242OUMS-A	EKI-1242IOUMS-A
Port Number	2	
Port Connector	DB9 Male	
Port Number	4	
Port Connector	RJ45	
Operating Temperature	-10 ~ 60 °C (14 ~ 140 °F)	-40 ~ 75 °C (-40 ~ 167 °F)
Storage Temperature	-40~85°C (-40~185°F)	
Mounting	DIN-rail, Wall	
Dimensions (W x H x D)	42 x 140 x 95 mm (1.66" x 5.52" x 3.75")	
Industrial Protocols	OPCUA, Modbus TCP, Modbus RTU	
Mode	Master	
Function Support	1, 2, 3, 4, 5, 6, 15, 16, 23	
Max. No. of Connections	64 connections	
Type	Slave	
Max. No. of Connection	128 connections	
Power Input	12 ~ 48 VDC, redundant dual inputs	
Power Consumption	5.2W	
Safety	UL60950-1	

Ordering Information

ESRP-PCS-EKI1242

Industrial Fieldbus Gateway Connecting Modbus to OPC UA

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Video Service Guarantee System

Congestion Management and Guarantee Video Service System

Edge Solution Ready Package

ESRP-FTS-EKI7706



- Guarantee Service for Video Stream
- Reduce Network Downtime
- Management of Congestion in Manufacturing



ESRP-FTS-EKI7706

Ethernet Ring



Enabling an Intelligent Planet

Video Service Guarantee System

ESRP-FTS-EKI7706



Guarantee Service for Video Stream

Advantech's Video Service Guarantee System can give priority and bandwidth to important video streams, such as surveillance applications, with timely network management and adjustment to ensure quality of services and low video latency.



Reduce Network Downtime

With Advantech X-Ring technology, network downtime is significantly reduced with automatic backup and recovery within 20 ms to prevent critical data loss or transmission failure.



Management of Congestion in Manufacturing

Automated optical inspection or visual identification equipment require real-time and stable image data transmission ability. Congestion Management Solution avoids packet loss and delay to ensure manufacturing processes are unaffected by network congestion.

AttrName	EKI-7706E-2FI
Port Number	6
RJ45 Port Interface	4 x 10/100/1000Base-T(X)
Fiber Port Interface	2 x 1000Mbps SFP
Standard	IEEE 802.3, 802.3u, 802.3x, 802.1D, 802.1w, 802.1p, 802.1Q, 802.1X, 802.3ad
Software feature	Security Pack, VLAN, IGMP, X-Ring, QoS, DHCP, IXM etc.
Mounting	DIN-Rail
Operating Temperature	-40 ~ 85°C (-40 ~ 185°F)
Relative Humidity (Non-condensing)	10 ~ 95%
Power Input	Dual 12~48Vdc
Reverse Polarity	Present
Safety	UL 61010
EMI	CE, FCC Class A
EMC	EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-8
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-32
Vibration	IEC 60068-2-6
Warranty Period	5 years

Ordering Information

ESRP-FTS-EKI7706

4GE + 2SFP Managed Ethernet Switch, with X-Ring and Video Guarantee Function

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Auto-Configuration Backup and Restore System

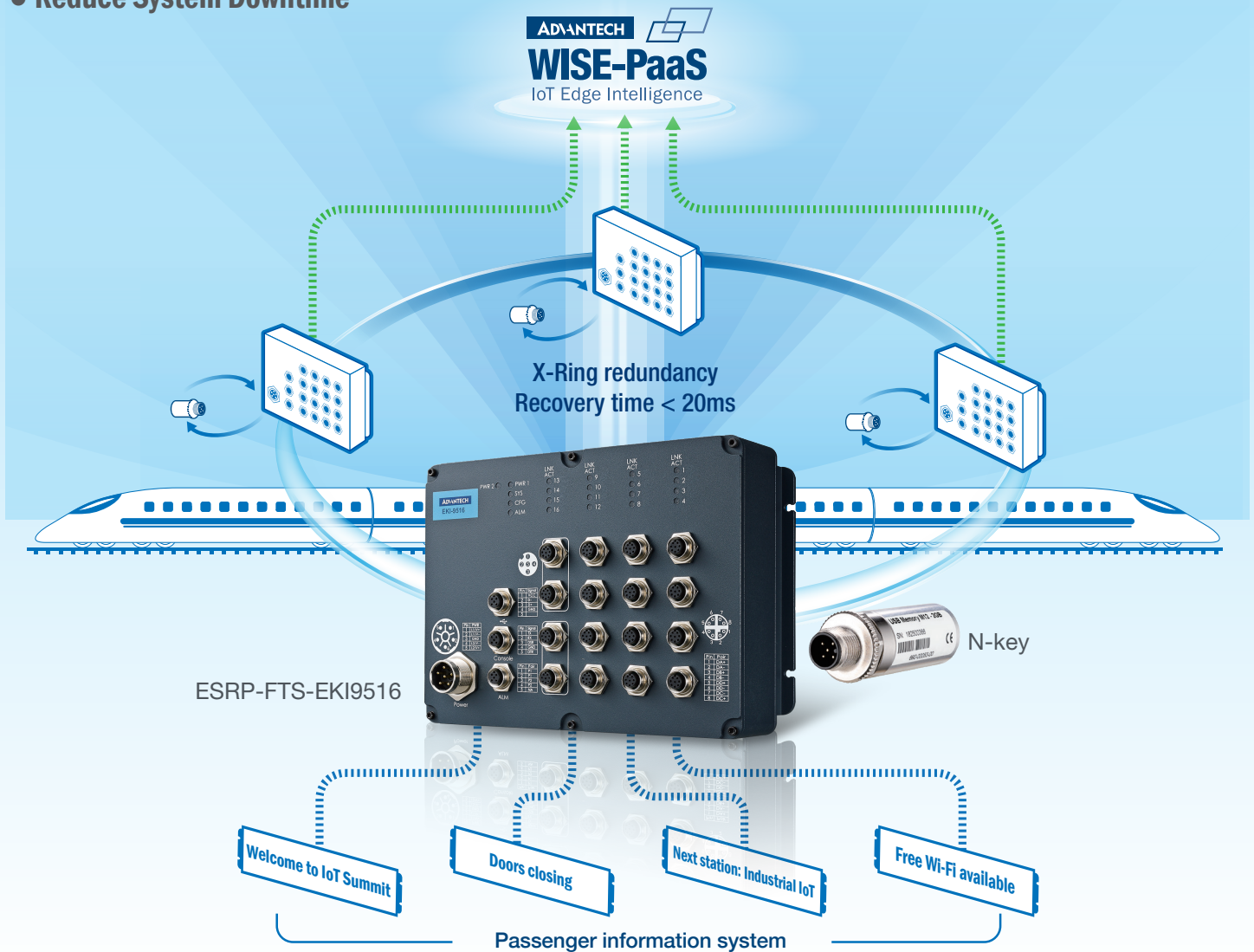
Auto-Configuration for Easy System Administration and Operation

Edge Solution Ready Package

ESRP-FTS-EKI9516



- Auto Configuration Backup and Restore
- Ease System Administration and Operation
- Reduce System Downtime



Auto-Configuration Backup and Restore System

ESRP-FTS-EKI9516



Auto Configuration Backup and Restore

Smart way to backup and restore configuration settings. Manual configuration is no longer needed.



Ease System Administration and Operation

A simple plug-in system can quickly backup and restoration configuration settings, and the low power design means that no extra power supply is required. With auto configuration for easy system administration and operation, users do not need to unnecessarily repeat complex configuration processes.



Reduce System Downtime

With auto configuration, users need not worry about long system downtimes. It can quickly re-install system configuration settings to switch and recover the entire system configuration when the switch boots up or reboots.

AttrName	EKI-9516-WV
Port Number	16
M12 Port Interface	16 x 10/100/1000Base-T M12 X-code
Bypass Port	2 pairs
F/W Backup Port	USB for N-Key backup function
Power Budget	90W
Standard	IEEE 802.3, 802.3u, 802.3x, 802.3z, 802.1D, 802.1w, 802.1p, 802.1Q, 802.1X, 802.3ad, 802.3ab
Software feature	VLAN, IGMP, X-Ring, QoS, DHCP, Port monitoring, RSTP etc.
IP Grade	IP67
Mounting	DIN-Rail
Operating Temperature	-40 ~ 70°C (-40 ~ 158°F)
Relative Humidity (Non-condensing)	5 ~ 95%
Power Input	Dual 24~110Vdc
Reverse Polarity	Present
EMI	CE, FCC Class A
Vertical Market	EN50155, EN50121-3-2
EMC	EN 61000-4-2 , EN 61000-4-3 , EN 61000-4-4 , EN 61000-4-5 , EN 61000-4-6 , EN 61000-4-8
Shock	IEC 61373
Freefall	IEC 60068-2-32
Vibration	IEC 61373
Warranty Period	5 years

Ordering Information

ESRP-FTS-EKI9516

EN50155 16x M12 GbE Managed Train Switch With N-Key Auto-Configuration

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