

# Industrial Networking Solutions



- Industrial Ethernet
- Serial Connectivity and Networking
- Industrial Wireless
- Embedded Computing



**MOXA®**



## New Product Showcase

### New Product Showcase

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# 2

## New Product Showcase



# New Product Showcase

## Industrial Ethernet Switches

### EDS-608 (page 3-24)

Coming Soon

**8-port compact modular managed Ethernet switch**



#### Features

- > Modular design lets you choose from a variety of media combinations
- > Turbo Ring and RSTP/STP (IEEE 802.1w/D) for Ethernet redundancy
- > QoS, IGMP snooping/GMRP, VLAN, LACP, SNMPv1/v2c/v3, RMON supported
- > IEEE 802.1X, HTTPS, and SSH to enhance network security
- > -40 to 75°C operating temperature (T models)

### EDS-P510 Series (page 3-40)

**7+3G-port Gigabit PoE managed Ethernet switches**



#### Features

- > 4 IEEE 802.3af-compliant PoE and Ethernet combo ports
- > Provides up to 15.4 watts at 48 VDC per PoE port
- > Intelligent power consumption detection, classification, and PoE scheduling function
- > 3 combo (10/100/1000BaseT(X) or 100/1000BaseSFP slot) Gigabit ports; 2 ports for redundant ring and 1 port for uplink
- > Turbo Ring (recovery time < 20 ms), RSTP/STP (IEEE 802.1w/D) for Ethernet redundancy

### EDS-G205/G308 Series (page 3-57)

**5G and 8G-port full Gigabit unmanaged Ethernet switches**



#### Features

- > Fiber optic options for extending distance and electrical noise immunity (EDS-G308)
- > Redundant dual 12/24/48 VDC power inputs
- > Relay output warning for power failure and port break alarm
- > Broadcast storm protection
- > -40 to 75°C operating temperature range (T models)

### EDS-G509 Series (page 3-29)

**9G-port full Gigabit managed Ethernet switches**



#### Features

- > 4 10/100/1000BaseT(X) ports plus 5 combo (10/100/1000BaseT(X) or 100/1000BaseSFP slot) Gigabit ports
- > Fiber optic options for extending distance and improving electrical noise immunity
- > Turbo Ring, RSTP/STP (IEEE 802.1w/D) for Ethernet redundancy
- > QoS, IGMP snooping/GMRP, VLAN, LACP, SNMPv1/v2c/v3, RMON supported
- > IEEE 802.1X, HTTPS, and SSH enhance network security

### IKS-6726 Series (page 3-14)

**24+2G-port Gigabit modular managed Ethernet switches**



#### Features

- > Meets UL 60950-1, NEMA TS2, EN50155/EN50121-4, and DNV/GL certifications
- > Turbo Ring and RSTP/STP for Ethernet redundancy
- > Isolated redundant power inputs with universal 24/48 VDC or 110/220 VDC/VAC power supply
- > Modular design lets you choose from a variety of media combinations
- > -40 to 75°C operating temperature range

### EDS-205A/208A Series (page 3-62)

**5 and 8-port unmanaged Ethernet switches**



#### Features

- > 10/100BaseT(X) (RJ45 connector), 100BaseFX (multi/single-mode, SC or ST connector)
- > Redundant dual 12/24/48 VDC, 18 to 30 VAC power inputs
- > IP30 aluminum housing
- > Rugged hardware design well-suited for hazardous locations (Class I Div. 2 / Zone 2) and marine environments (DNV/GL/ABS/LR/NKK)
- > -40 to 75°C operating temperature range (T models)

## Industry-specific Ethernet Switches

### TN-5508/5510/5516/5518 Series (page 4-7)

Coming Soon

**8, 8+2G, 16, 16+2G-port M12 managed Ethernet switches**



#### Features

- > M12 connectors for robust links
- > Wide power input range from 12 to 110 VDC (LV-MV model)
- > Isolated redundant power inputs with universal 12/24/36/48 VDC, 72/96/110 VDC, or 110/220 VDC/VAC power supply range
- > 2-port flexibility of Gigabit Ethernet ports with relay bypass function
- > EN50155/50121-3-2/50121-4, NEMA TS2, and e1 compliant
- > -40 to 75°C operating temperature range (T models)

### TN-5308 Series (page 4-10)

Coming Soon

**8-port M12 unmanaged Ethernet switches**



#### Features

- > Universal 12/24/36/48 or 72/96/110 VDC power supply range
- > M12 connectors and IP40 metal housing
- > Supports IEEE 802.3/802.3u/802.3x
- > EN50155/50121-3-2/50121-4, NEMA TS2, and e1 compliant
- > -40 to 75°C operating temperature range (T models)

## PT-7828 Series (page 4-20)

**IEC 61850-3 24+4G-port Layer 3 Gigabit modular managed rackmount Ethernet switches**



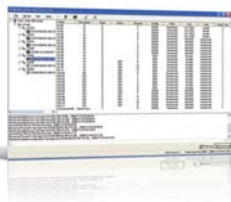
### Features

- > Layer 3 routing to interconnect multiple LAN segments
- > IEC 61850-3, IEEE 1613 (power substations), NEMA TS2 (traffic control systems), and EN50121-4 (railway applications) compliant
- > Turbo Ring and RSTP/STP for Ethernet redundancy
- > Isolated redundant power inputs with universal 24/48 VDC or 110/220 VDC/VAC power supply range
- > Modular design for various media options: RJ45, fiber optic, M12, and SFP ports
- > -40 to 85°C operating temperature range

## : Industrial I/O

## Active OPC Server Lite (page 5-11)

**Seamlessly connect ioLogik to your SCADA system**



### Features

- > OPC DA 3.0 supported
- > Event-driven tag update:
  - Save 80% on network bandwidth
  - I/O response that's 7 times faster
- > Patented automatic tag generation
- > Firewall-friendly connection from remote ioLogik devices
  - Allows remote I/O to use dynamic IP
  - Allows remote I/O to use private IP
- > Download free from Moxa's website

## ioLogik E2242 (page 5-19)

**Active Ethernet I/O with 4 analog inputs and 12 configurable DI/Os**



### Features

- > 4 fixed differential analog input channels
- > 12 configurable digital input/output channels
- > DI counter saved automatically when power shuts off
- > Instant event messaging by TCP/UDP/email/SNMP-Trap
- > PC-based configuration utility and web console
- > Easy-to-use Click&Go™ Logic for local output control
- > Windows/WinCE VB/VC.NET and Linux C APIs
- > I/O control over Modbus/TCP and SNMP protocol
- > NIST traceable calibration

## ioLogik E4200 (page 5-24)

**Modular Active Ethernet I/O adaptor**



### Features

- > Supports up to 16 I/O modules
- > Dual Ethernet LANs and one RS-232 port
- > Front-end intelligence that supports 80 Click&Go rules
- > Unicode Active Messaging with real-time stamp, including SMS, SNMP Trap with I/O status, TCP, email
- > Built-in web console
- > PC utility: Auto detection of installed modules
- > Windows/WinCE VB/VC.NET and Linux C APIs

## PT-7710 Series (page 4-26)

**IEC 61850-3 8+2G-port Gigabit modular managed rackmount Ethernet switches**



### Features

- > IEC 61850-3, IEEE 1613 (power substations), NEMA TS2 (traffic control systems), and EN50121-4 (railway applications) compliant
- > Turbo Ring and RSTP/STP for Ethernet redundancy
- > Universal power supply range, 12/24/48 VDC or 110/220 VDC/VAC
- > Modular design lets you choose from a variety of media combinations
- > -40 to 85°C operating temperature range

## Click&Go (page 5-13)

**Easy and intuitive I/O control configuration for ioLogik Active Ethernet I/O**



### Features

- > PC-free solution with local intelligence
- > Programming-free IF-THEN-ELSE logic reduces setup time
- > Time stamped active alarm reports with TCP, UDP, SNMP Trap, email, SMS, or CGI commands
- > Time-based scheduler and timer control
- > Input-to-output control over IP with peer-to-peer and remote action

## ioMirror E3210 (page 5-22)

**Ethernet Peer-to-Peer I/O with 8 digital inputs and 8 digital outputs**



### Features

- > Direct input-to-output signal communication over IP
- > High speed Peer-to-Peer I/O within 20 ms
- > One physical alarm port for connectivity status
- > Quick and easy utility and web-based settings
- > Local alarm channel and remote alarm messaging
- > Supports Modbus/TCP for remote monitoring
- > Optional LCD module for convenient configuration

## ioLogik W5340 (page 5-27)

**Active GPRS I/O with 4 AIs, 8 DI/Os, and 2 relay outputs**



### Features

- > GPRS, Ethernet LAN, RS-232/422/485 supported
- > Smart Active GPRS connection
- > Low power consumption
- > Secure wake on call ID
- > Active messaging with real-time stamp
- > SNMP Trap with I/O status
- > Data logging with SD card
- > Unicode Active Messaging with real-time stamp, including SMS, SNMP Trap with I/O status, TCP, email
- > ioAdmin and Active OPC Server supported
- > Windows/WinCE VB/VC.NET and Linux C APIs

## : Video Networking Products

### VPort 354 Series (page 6-7)

Coming Soon

**Full motion, 4-channel MJPEG/MPEG4 industrial video encoders**



#### Features

- > Industrial design with -40 to 75°C operating temperature and fiber optic Ethernet port
- > 2 Ethernet ports for cascade and port redundancy
- > SD card slot for local storage capability
- > Modbus/TCP supported for easy communication with SCADA software
- > Video stream up to 120 frames/sec at 4CIF (704 x 480) resolution

### VPort 351 Series (page 6-13)

**Full motion, 1-channel MJPEG/MPEG4 industrial video encoder**



#### Features

- > Industrial design with -40 to 75°C operating temperature and fiber optic Ethernet port
- > Video stream up to 30 frames/sec at full D1 (720 x 480) resolution
- > Pre/post-alarm video recording function for advanced surveillance
- > 2-way (1-in/1-out) audio supported
- > Free VPort SDK PLUS and 4-channel video surveillance software

### VPort 251 (page 6-20)

**Full motion, 1-channel MJPEG/MPEG4 video encoder**



#### Features

- > Compress analog video/audio signals into MJPEG/MPEG4 video streams
- > Video stream up to 30 frames/sec at full D1 (720 x 480) resolution
- > 2-way (1-in/1-out) audio supported
- > Transparent PTZ control for using legacy PTZ control panel or keyboard
- > Loop-through power output for powering an analog camera

### VPort D351 (page 6-22)

**1-channel MJPEG/MPEG4 industrial video decoder**



#### Features

- > Decode MJPEG and MPEG4 video streams to an analog video signal automatically
- > Manual selection or automatic scan with maximum of 64 video sources
- > 2-way (1-in/1-out) audio supported
- > Transparent PTZ control with legacy PTZ controller
- > SNMP for network management

### VPort 25 Series (page 6-24)

**IP66, day-and-night vandal-proof fixed dome IP camera for outdoors**



#### Features

- > -40 to 50°C operating temperature; heater or fan not required
- > IP66-rated for protection from rain and dust
- > Direct-wired power input and PoE for power redundancy
- > Up to 30 frames/sec at 720 x 480 resolution
- > One camera lens for both day and night use

### SoftNVR (page 6-27)

**Expandable IP surveillance software for managing up to 64 video channels**



#### Features

- > Multi-screen viewing format (maximum of 64 channels)
- > Dual monitor capability
- > Video analytics and instant response
- > Video quality enhancement tools
- > Intelligent and convenient video search

## : Terminal Servers

### CN2600 Series (page 7-24)

**8 and 16-port RS-232/422/485 terminal servers with LAN redundancy**



#### Features

- > LCD panel for easy IP address configuration
- > Dual-LAN cards with two independent MAC addresses and IP addresses
- > Redundant COM function available when both LANs are active
- > Dual-host redundancy can be used to add a backup PC to your system
- > Dual AC power inputs
- > Real COM/TTY drivers for Windows and UNIX



## Serial Device Servers

### NPort S8000 Series (page 8-16)

*Combo switch / serial device server*



#### Features

- > Configurable serial data transmission priority
- > 5-port managed Ethernet switch built in
- > Ethernet redundancy with Turbo Ring® (recovery time < 20 ms) or RSTP/STP (IEEE 802.1w/D)
- > QoS, IGMP-snooping/GMRP, VLAN, LACP, SNMPv1/v2c/v3, RMON supported
- > 4-port RS-232/422/RS-485 serial device server
- > 2 KV (DC) isolation protection for each serial port
- > Surge protection for serial, power, and Ethernet
- > 15 KV ESD surge protection for all serial signals
- > Adjustable pull high/low resistor and terminator for RS-485 ports

### NPort 5600 Desktop Series (page 8-35)

*8-port RS-232/422/485 serial device servers*



#### Features

- > 8 serial ports supporting RS-232/422/485
- > Compact desktop design
- > 10/100M auto-detecting Ethernet
- > Built-in 15 KV ESD protection for all serial signals
- > Easy IP address configuration with LCD panel
- > Choice of configuration methods: Web console, Telnet console, and Windows utility
- > Versatile socket operation modes, including TCP Server, TCP Client, UDP, and Real COM
- > SNMP MIB-II for network management
- > Built-in recorder: Use your own voice as the alert when exceptions occur

### MiiNePort E1 Series (page 8-42)

*10/100 Mbps embedded serial device servers*



**Coming Soon**

#### Features

- > Same size as an RJ45 connector—only 33.9 x 16.25 x 13.5 mm
- > Extremely low power consumption—only 600 mW @ 3.3 VDC input
- > Uses the MiiNe, Moxa's second generation SoC
- > NetEz technology makes integration incredibly easy
- > Versatile choice of operation modes: Real COM, RFC2217, TCP Server, TCP Client, UDP, and Modem

### WE-2100T Series (page 8-49)

*Wireless LAN embedded serial device servers*



#### Features

- > Connects serial devices to IEEE 802.11a/b/g networks
- > Choice of operation modes: Real COM, TCP Server, TCP Client, UDP, and RFC2217
- > Windows (including Vista) Real COM and Linux fixed TTY drivers provided
- > Wireless security with WEP, WPA, and WPA2
- > Select any baudrate between 50 bps and 921.6 Kbps
- > 9 programmable digital I/O channels
- > SSL/SSH encryption for configuration
- > Compact size and easy to mount housing

## Ethernet Fieldbus Gateways

### MGate™ MB3170/3270 (page 9-8)

*1 and 2-port advanced serial-to-Ethernet Modbus gateways*



#### Features

- > Configuration is exceptionally easy
- > Slave mode supports 16 TCP masters and up to 62 serial slaves at the same time
- > Master mode supports 32 TCP slaves at the same time
- > Emergency request tunnels ensure QoS control
- > Serial redirector function provided
- > Embedded Modbus protocol analyzer
- > Redundant dual DC power inputs
- > Built-in Ethernet cascading for easy wiring

### MGate EIP3000 (page 9-13)

*1 and 2-port DF1 to Ethernet/IP gateways*



#### Features

- > Supports PCCC objects for Rockwell Automation networks
- > Supports 8 simultaneous Ethernet/IP clients with up to 16 simultaneous requests per client
- > Serial redirector function provided
- > Remote serial port for multiple DF1 device communication
- > Embedded Ethernet/IP and DF1 protocol analyzer
- > Redundant dual DC power inputs
- > Built-in Ethernet cascading for easy wiring

## : Multiport Serial Boards

### CP-102E/EL (page 10-26)

**2-port RS-232 PCI Express boards**



#### Features

- > PCI Express x1 compliant
- > 921.6 Kbps maximum baudrate for super fast data transmission
- > 128-byte FIFO and on-chip H/W, S/W flow control
- > Low profile form factor fits small-sized PCs
- > Drivers provided for Windows (2000, XP/2003/Vista/2008 x86/x64), Linux 2.4/2.6, QNX 6, Windows XP Embedded, SCO OpenServer 5/6, UnixWare 7
- > 15 KV ESD protection on the board

### CP-132EL/EL-I (page 10-28)

**2-port RS-422/485 PCI Express boards with optional 2 KV isolation**



#### Features

- > PCI Express x1 compliant
- > 921.6 Kbps maximum baudrate for super fast data transmission
- > 128-byte FIFO and on-chip H/W, S/W flow control
- > Low profile form factor fits small-sized PCs
- > Drivers provided for Windows (2000, XP/2003/Vista/2008 x86/x64), Linux 2.4/2.6, QNX 6, Windows XP Embedded, SCO OpenServer 5/6, UnixWare 7
- > 15 KV ESD protection on the board

### CP-112UL/112UL-I Series (page 10-52)

**2-port RS-232/422/485 Universal PCI serial boards with optional 2 KV isolation**



#### Features

- > Over 700 Kbps data throughput for top performance
- > 128-byte FIFO and on-chip H/W, S/W flow control
- > Universal PCI compatible with 3.3/5 V PCI and PCI-X
- > Serial communication speed up to 921.6 Kbps
- > Drivers provided for Windows (2000, XP/2003/Vista/2008 x86/x64), Windows CE 5.0/6.0, Windows XP Embedded, Linux 2.4/2.6, SCO OpenServer 5/6, UnixWare 7
- > Easy maintenance with on-board LED display
- > On-board 15 KV ESD and 2 KV optical isolation protection
- > Wide temperature model available for -40 to 85°C environments

## : USB Connectivity

### UPort™ 2210/2410 (page 11-23)

**2 and 4-port RS-232 USB-to-serial converters**



#### Features

- > Hi-Speed USB 2.0 for up to 480 Mbps USB transmission
- > 921.6 Kbps maximum baudrate for super fast data transmission
- > Additional I/O and IRQ not needed
- > Built-in 15 KV ESD protection for all serial ports
- > Certified drivers provided for Windows (including Vista) and Linux
- > Supports Fixed-Base COM Utility for setting the initial COM port number
- > LEDs for easy monitoring

### CP-114EL/EL-I (page 10-22)

**4-port RS-232/422/485 PCI Express boards with optional 2 KV isolation**



#### Features

- > PCI Express x1 compliant
- > 921.6 Kbps maximum baudrate for super fast data transmission
- > 128-byte FIFO and on-chip H/W, S/W flow control
- > Low profile form factor fits small-sized PCs
- > Drivers provided for Windows (2000, XP/2003/Vista/2008 x86/x64), Linux 2.4/2.6, QNX 6, Windows XP Embedded, SCO OpenServer 5/6, UnixWare 7
- > 15 KV ESD protection on the board

### CP-114UL/114UL-I (page 10-46)

**4-port RS-232/422/485 Universal PCI serial board with optional 2 KV isolation**



#### Features

- > Over 700 Kbps data throughput for top performance
- > 128-byte FIFO and on-chip H/W, S/W flow control
- > Universal PCI compatible with 3.3/5 V PCI and PCI-X
- > Serial communication speed up to 921.6 Kbps
- > Drivers provided for Windows (2000, XP/2003/Vista/2008 x86/x64, 9X/ME/NT), Windows CE 5.0/6.0, Windows XP Embedded, DOS, Linux 2.4/2.6, FreeBSD 4/5, QNX 6, SCO Open Server 5/6, UnixWare 7
- > Easy maintenance with on-board LED display
- > On-board 15 KV ESD and 2 KV optical isolation protection
- > Wide temperature model available for -40 to 85°C environments

### CP-102UF Series (page 10-60)

**2-port Universal PCI serial over fiber boards**



#### Features

- > Extend serial transmission distance up to:
  - 40 km with single mode—CP-102UF-S-ST
  - 5 km with multi-mode—CP-102UF-M-ST
- > Supports "Ring" and "Point-to-Point" transmission modes
- > 921.6 Kbps maximum baudrate for super fast data transmission
- > 128-byte FIFO and on-chip H/W, S/W flow control
- > Compatible with 3.3/5 V PCI and PCI-X
- > Drivers provided for Windows (2000, XP/2003/Vista/2008 x86/x64), Windows XP Embedded, Windows CE 5.0/6.0, DOS, Linux 2.4, Linux 2.6 (x86/x64), QNX 6, SCO OpenServer 5/6, UnixWare 7
- > Easy maintenance with on-board LED display and management software
- > Immune from signal interference
- > Guards against electronic degradation and chemical corrosion
- > Wide temperature model available for -40 to 85°C environments

### UPort™ 2230/2430 (pages 11-25)

**2 and 4-port RS-422/485 USB-to-serial converters**



#### Features

- > Hi-Speed USB 2.0 for up to 480 Mbps USB transmission
- > 921.6 Kbps maximum baudrate for super fast data transmission
- > Additional I/O and IRQ not needed
- > Built-in 15 KV ESD protection for all serial ports
- > Certified drivers provided for Windows (including Vista) and Linux
- > Supports Fixed-Base COM Utility for setting the initial COM number
- > LEDs for easy monitoring

## UPort™ 404/407 (page 11-27)

**4 and 7-port industrial-grade USB hubs**



### Features

- > Hi-Speed USB 2.0 for up to 480 Mbps USB transmission
- > USB-IF certification
- > Dual power supply (power jack and terminal block)
- > 15 KV ESD Level 4 protection for all USB ports
- > Rugged metal housing
- > DIN-Rail and wall mountable
- > Comprehensive diagnostic LEDs
- > Choose bus power or external power (UPort™ 404)

## UPort™ 204/207 (page 11-29)

**4 and 7-port entry-level USB hubs**



### Features

- > Hi-Speed USB 2.0 for up to 480 Mbps USB transmission
- > USB-IF Certification
- > Compatible with USB 1.1 devices
- > 15 KV ESD Level 4 protection for all USB ports
- > Wall mountable
- > Comprehensive diagnostic LEDs
- > Full 500 mA of power per port
- > Choose bus power or external power (UPort™ 204 only)

## Media Converters

### TRC-190 Series (page 12-7)

**Rackmount chassis for the N Rack System**



### Features

- > 19-inch chassis for rackmount use
- > 19 slots for high density applications
- > Supports hot-swap and dual power input with redundancy
- > Fan-less chassis design reduces repair time

### TCF-142-RM Series (page 12-9)

**RS-232/422/485 to fiber slide-in modules for the N Rack System**



### Features

- > Extend RS-232/422/485 transmission up to:
  - 40 km with single mode
  - 5 km with multi-mode
- > 1K or 150K ohm adjustable pull high/low resistor
- > "Ring" and "Point-to-Point" transmission supported

### ICF-1150 Series (page 12-11)

**Industrial serial-to-fiber converters**



### Features

- > RS-232, fiber, and RS-422/485 3-way communication
- > Rotary switch to change the pull high/low resistor value
- > Extend RS-232/422/485 transmission up to:
  - 40 km with single-mode
  - 5 km with multi-mode
- > 3-way Galvanic Isolation (for "I" model only)
- > -40 to 85°C wide temperature models available
- > Class I, Div. II certification (Pending)

### TCF-142 Series (page 12-14)

**RS-232/422/485 to optical fiber media converters**



### Features

- > "Ring" and "Point-to-Point" transmission
- > Extends RS-232/422/485 transmission up to:
  - 40 km with single-mode—TCF-142-S
  - 5 km with multi-mode—TCF-142-M
- > Compact size
- > Decreases signal interference
- > Protects against electrical interference and chemical corrosion
- > Supports baudrates of 50 bps to 921.6 Kbps
- > Wide temperature models available (-40 to 75°C)

### TCF-90 Series (page 12-17)

**Port-powered RS-232 to optical fiber media converters**



### Features

- > Use either external power or power over serial
- > Extends RS-232 transmission up to:
  - 40 km with single-mode—TCF-90-S
  - 5 km with multi-mode—TCF-90-M
- > Reduces signal interference
- > Protects against electrical interference or chemical corrosion
- > 15 KV ESD protection for serial signals
- > Baudrates up to 115.2 Kbps
- > Compact size

### TCF-100/100I Series (page 12-19)

**Industrial RS-232 to RS-422/485 converters with optional 2 KV isolation**



### Features

- > RS-232 to RS-422 conversion with RTS/CTS support
- > RS-232 to 2-wire or 4-wire RS-485 conversion
- > 2 KV isolation protection (TCC-100I)
- > Wall and DIN-rail mounting
- > Plug-in terminal block for easy RS-422/485 wiring
- > LED indicators for power, Tx, Rx
- > -20 to 60°C operating temperature
- > Wide temperature model available (-40 to 85°C)



## : WLAN & Cellular Solutions

### | AWK-4222 Series (page 13-16)

Coming Soon

*Industrial IEEE 802.11a/b/g outdoor dual-RF AP/Bridge/Client*



#### Features

- > IEEE 802.11a/b/g compliant
- > Redundant power inputs and PoE
- > Higher security with WEP/WPA/WPA2/802.11X and powerful filters
- > Turbo Roaming™ for seamless wireless connections
- > Dual-RF design for redundant wireless communication
- > Wide operating temperature range and IP67-rated metal housing for hazardous environments

### | AWK-4121 Series (page 13-18)

*Industrial IEEE 802.11a/b/g outdoor wireless AP/Bridge/Client*



#### Features

- > IEEE 802.11a/b/g compliant
- > Redundant power inputs and PoE
- > Higher security with WEP/WPA/WPA2/802.11X and powerful filters
- > Turbo Roaming™ for seamless wireless connections
- > Long-distance communication support
- > Wide operating temperature range and IP67-rated metal housing for hazardous environments

### | AWK-3222 Series (page 13-20)

Coming Soon

*Industrial IEEE 802.11a/b/g dual-RF AP/Bridge/Client*



#### Features

- > IEEE 802.11a/b/g compliant
- > Redundant power inputs and PoE
- > Higher security with WEP/WPA/WPA2/802.11X and powerful filters
- > Turbo Roaming™ for seamless wireless connections
- > Dual-RF design for redundant wireless communication

### | AWK-3121 Series (page 13-22)

*Industrial IEEE 802.11a/b/g wireless AP/Bridge/Client*



#### Features

- > IEEE 802.11a/b/g compliant
- > Power input by redundant 24 VDC power inputs or Power-over-Ethernet
- > Powerful security with WPA/WPA2/802.11X filters
- > Turbo Roaming™ for seamless wireless connection
- > Long-distance communication support
- > STP/RSTP support to increase reliability
- > DIN-Rail or wall mounting ability
- > IP30 protected high-strength metal housing
- > -40 to 75°C operating temperature range (T models)

### | OnCell 5004/5104-HSDPA (page 13-34)

Coming Soon

*Industrial tri-band UMTS/HSDPA high speed cellular routers*



#### Features

- > Universal tri-band UMTS/HSDPA 850/900/2100 MHz
- > Industrial primary and backup wireless WAN connectivity
- > Connect up to 4 10/100BaseT(X) devices
- > Redundant DC power inputs
- > 2 digital inputs and 1 relay output (OnCell 5104-HSDPA only)

### | OnCell 5004/5104 (page 13-36)

Coming Soon

*Industrial quad-band GSM/GPRS cellular routers*



#### Features

- > Universal quad-band GSM/GPRS 850/900/1800/1900 MHz
- > Industrial primary and backup wireless WAN connectivity
- > Connect up to 4 10/100BaseT(X) devices
- > Redundant DC power inputs
- > 2 digital inputs and 1 relay output (OnCell 5104 only)

### | OnCell G3110/3150-HSDPA (page 13-38)

*Industrial tri-band UMTS/HSDPA IP gateways*



#### Features

- > Universal tri-band UMTS/HSDPA 850/900/2100 MHz
- > Bring 10/100Base-T and serial devices together
- > Choice of operation modes, including TCP Server, TCP Client, UDP, Real COM, Reverse Real COM, and RFC2217
- > Secure modes for TCP Server, TCP Client, Real COM, and Reverse Real COM
- > Redundant DC power inputs
- > Two digital inputs and 1 relay output
- > Centralize private IP management software
- > DIN-Rail mounting

### | OnCell G3110/3150 (page 13-40)

*Industrial quad-band GSM/GPRS/EDGE IP gateways*



#### Features

- > Connect both Ethernet and serial devices to cellular networks
- > Universal quad-band GSM/GPRS/EDGE-850/900/1800/1900 MHz
- > Choice of operation modes, including TCP Server, TCP Client, UDP, Real COM, and RFC2217
- > Secure modes for TCP Server, TCP Client, and Real COM
- > Redundant DC power input
- > 2 digital inputs and 1 relay output
- > Centralize private IP management software
- > DIN-Rail mounting

## OnCell G3111/3151/3211/3251 (page 13-42)

Coming Soon

1 and 2-port RS-232 or RS-232/422/485 cellular IP modems



### Features

- > Universal quad-band GSM/GPRS 850/900/1800/1900 MHz
- > Choice of operation modes, including TCP Server, TCP Client, UDP, Real COM, and Reverse Real COM
- > Management software: private IP management with OnCell Central
- > Choice of configuration methods, including web console, serial console, and Telnet
- > Desktop or DIN-Rail installation

## NPort® W2150/2250 Plus (page 13-26)

1 and 2-port RS-232/422/485 IEEE 802.11a/b/g wireless device servers



### Features

- > Link any serial device to an IEEE 802.11a/b/g network
- > 921.6 Kbps baudrate for RS-232/422/485 transmissions
- > Web-based configuration using built-in Ethernet or WLAN
- > Enhanced remote configuration with HTTPS, SSH
- > Secure data access with WEP, WPA, WPA2
- > Built-in WLAN site survey tool
- > Wireless roaming with user-defined signal strength threshold
- > Off-line port buffering and serial data log
- > Dual power inputs (1 power jack, 1 terminal block)

## : Embedded Computers for Communication

### V462 Series (page 15-8)

x86-based computers with 4 serial ports, dual LANs, VGA, CompactFlash, PCMCIA, USB



### Features

- > AMD Geode LX 800@0.9W CPU, 500 MHz
- > Built-in 256 MB (CE) or 512 MB (XPe) DDR SDRAM
- > Built-in 256 MB (CE) or 1 GB (XPe) industrial DOM to store the operating system
- > 256 KB of SRAM with battery backup
- > Dual 10/100 Mbps Ethernet ports for network redundancy
- > 4 USB 2.0 hosts supporting system boot up
- > LED indicators for power, battery, storage
- > Ready-to-run WinCE 6.0 or Windows XP Embedded platform
- > -40 to 75°C wide temperature model available

### V464 Series (page 15-11)

x86-based computers with 4 serial ports, quad LANs, VGA, CompactFlash, USB



### Features

- > AMD Geode LX 800@0.9W CPU, 500 MHz
- > Built-in 256 MB (CE) or 512 MB (XPe) DDR SDRAM
- > Built-in 256 MB (CE) or 1 GB (XPe) industrial DOM to store the operating system
- > 256 KB of SRAM with battery backup
- > Quad 10/100 Mbps Ethernet ports for network redundancy
- > LED indicators for power, battery, storage
- > Ready-to-run WinCE 6.0 or Windows XP Embedded platform
- > -40 to 75°C wide temperature model available

### V466 Series (page 15-14)

x86-based computers with 4 serial ports, quad LANs, VGA, CompactFlash, built-in 8-port Ethernet switch, USB



### Features

- > AMD Geode LX 800@0.9W CPU, 500 MHz
- > Built-in 256 MB (CE) or 512 MB (XPe) DDR SDRAM
- > Built-in 256 MB (CE) or 1 GB (XPe) industrial DOM to store the operating system
- > 256 KB battery backup SRAM
- > Quad 10/100 Mbps Ethernet ports for network redundancy
- > Built-in 8-port Ethernet switch for connecting network devices
- > 4 USB 2.0 hosts supporting system boot up
- > LED indicators for power, battery, storage
- > Ready-to-run WinCE 6.0 or Windows XP Embedded platform
- > Robust, fan-less design
- > -40 to 75°C wide temperature model available

### V468 Series (page 15-17)

x86-based computers with 4 serial ports, quad LANs, VGA, 8 Dis, 8 DOs, CompactFlash, USB



### Features

- > AMD Geode LX 800@0.9W CPU, 500 MHz
- > Built-in 256 MB (CE) or 512 MB (XPe) DDR SDRAM
- > Built-in 256 MB (CE) or 1 GB (XPe) industrial DOM to store the operating system
- > 256 KB battery backup SRAM
- > Quad 10/100 Mbps Ethernet ports for network redundancy
- > 8 DI and 8 DO interfaces for digital input/output connections, with 3 KV isolation protection
- > 4 USB 2.0 hosts supporting system boot up
- > LED indicators for power, battery, storage
- > Ready-to-run WinCE 6.0 or Windows XP Embedded platform
- > -40 to 75°C wide temperature model available

### UC-8410 Series (page 15-23)

RISC-based industrial embedded computers with 8 serial ports, 3 LANs, DIO, 2 CAN ports, CompactFlash, USB



### Features

- > Intel XScale IXP435 533 MHz processor
- > 256 MB DDR2 SDRAM and 16 MB Flash ROM onboard
- > 32 MB NAND Flash for data storage
- > 8 RS-232/422/485 serial ports
- > 4 digital input and 4 digital output channels
- > 3 10/100 Mbps Ethernet ports
- > 2 USB 2.0 hosts for mass storage devices
- > Ready-to-run Linux platform
- > Robust, fanless design
- > Wide temperature model available

### UC-8416 Series (page 15-26)

RISC-based industrial embedded computers with 8 serial ports, 3 LANs, DIO, 8 built-in Ethernet switch ports, CompactFlash, USB



### Features

- > Intel XScale IXP435 533 MHz processor
- > 256 MB DDR2 SDRAM and 16 MB Flash ROM onboard
- > 32 MB NAND Flash for data storage
- > 8 RS-232/422/485 serial ports
- > 8 Ethernet switch ports
- > 4 digital input and 4 digital output channels
- > 3 10/100 Mbps Ethernet ports
- > 2 USB 2.0 hosts for mass storage devices
- > Ready-to-run Linux platform
- > -40 to 75°C wide temperature model available

## UC-8418 Series (page 15-29)

**RISC-based industrial embedded computers with 8 serial ports, 3 LANs, DIO, 2 CAN ports, CompactFlash, USB**



### Features

- > Intel XScale IXP435 533 MHz processor
- > 256 MB DDR2 SDRAM and 16 MB Flash ROM onboard
- > 32 MB NAND Flash for data storage
- > 8 RS-232/422/485 serial ports
- > 2 CANbus ports
- > 12 digital input and 12 digital output channels
- > 3 10/100 Mbps Ethernet ports
- > 2 USB 2.0 hosts for mass storage devices
- > Ready-to-run Linux platform
- > Robust, fanless design
- > -40 to 75°C wide temperature model available

## DA-681 Series (page 15-49)

**x86-based rackmount embedded computer with 4 isolated RS-232 and 8 isolated RS-485 ports, 6 LANs, VGA, CompactFlash, USB**



### Features

- > Intel Celeron M 1 GHz processor with 400 MHz FSB
- > 1 x 200-pin DDR2 SODIMM socket, supporting DDR2 400 up to 1 GB
- > 6 10/100 Mbps Ethernet ports
- > 1 CompactFlash socket, 1 IDE and serial ATA-150 connectors for storage expansion
- > USB 2.0 ports for high speed peripherals
- > Serial port speed from 50 to 921.6 Kbps, supporting nonstandard baudrates
- > Embedded Linux, WinCE 6.0, or WinXP platform
- > 19-inch rackmount model, 1U high
- > Dual 100/240 VAC/VDC power input (DP/PP version)
- > Fanless Design

## DA-682 Series (page 15-52)

**x86-based rackmount computers with VGA, 4 Gigabit Ethernet ports, 2 peripheral expansion slots, CompactFlash, USB**



### Features

- > Intel Celeron M 1 GHz processor with 400 MHz FSB
- > Built-in DDR2 SDRAM and industrial flash disk module
- > Quad Gigabit Ethernet ports for network redundancy
- > Software selectable RS-232/422/485 with 2 KV isolation protection
- > PCI expansion slots for inserting expansion modules
- > 1 CompactFlash socket for storage expansion
- > USB 2.0 ports for high speed peripherals, supporting system startup
- > 19-inch rackmount, 2U high form factor
- > 100/240 VAC/VDC power inputs
- > Ready-to-Run Linux, WinCE 6.0, or Windows XP Embedded platform
- > Fanless design

## : Embedded Computers for Automation

## IA260 Series (page 16-3)

**RISC-based computers with 4 serial ports, dual LANs, VGA, DIO, CompactFlash, USB**



### Features

- > Cirrus Logic EP9315 ARM9 CPU, 200 MHz
- > 128 MB RAM on-board, 32 MB flash disk
- > 4 software-selectable RS-232/422/485 serial ports
- > VGA interface for field site monitoring
- > Dual 10/100 Mbps Ethernet for network redundancy
- > 8+8 DI/DO channels, up to 30 VDC12 to 48 VDC power input design
- > Supports CompactFlash and USB 2.0 hosts
- > Ready-to-run Linux or WinCE 6.0 platform
- > H-type heat dissipation design for system reliability
- > -40 to 75°C wide operating temperature model available

## IA-261-I/262-I Series (page 16-6)

**RISC-based computers with 2 or 4 digitally isolated serial ports, dual LANs, VGA, CAN, DIO, CompactFlash, USB**



### Features

- > Cirrus Logic EP9315 ARM9 CPU, 200 MHz
- > 128 MB RAM on-board, 32 MB flash disk
- > VGA interface for field site monitoring
- > 2 KV digitally isolated RS-232/422/485 serial ports
- > Dual 10/100 Mbps Ethernet for network redundancy
- > Dual 2 KV digitally isolated CAN ports with CANopen protocol support
- > 8+8 DI/DO with 3 KV optical isolation protection
- > 12 to 48 VDC redundant power input design
- > Supports CompactFlash and USB 2.0 hosts
- > Ready-to-run Linux or WinCE 6.0 platform
- > -40 to 75°C wide temperature models available