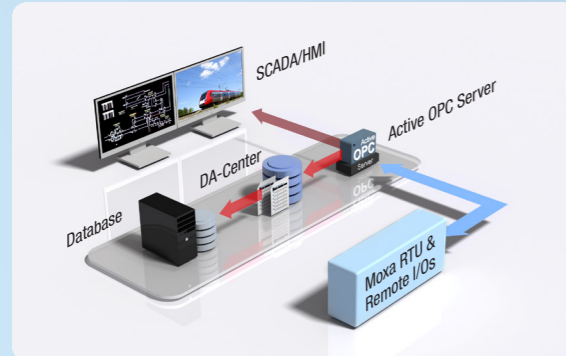


## Automation Software



### Fast, Bandwidth-Saving SCADA Database Communication

#### Active OPC Server

- Event-driven tag updates
- 7 times faster in I/O response time
- 80% network bandwidth savings

#### DA-Center

- Converts field data to ODBC-compliant database
- Converts field data to Excel or Access spreadsheets
- Provides embedded trend charts for historical analysis



### Programming-Free I/O Control

#### Click&Go™ Control Logic

- Easy, intuitive IF-THEN-ELSE control logic
- PC-free solution with local intelligence
- Active alarms with TCP, UDP, SNMP trap, e-mail, SMS, and CGI commands

Note: Only ioLogik W5300 and ioLogik E2200 models support Click&Go™ technology.

# Railway Data Acquisition and Condition Monitoring



Wide Temperature



EN 50155/50121 Compliant



Modular Design

**Keep You on Track**  
Modular RTU Controller & Remote I/O for  
Enhancing Maintenance Efficiency

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# Driving Maintenance Efficiency with Moxa's Data Acquisition Solutions

Monitoring railway assets has become increasingly important in order to ensure operational reliability and sustainability. IP technology can make it more efficient for engineers to remotely maintain the railway infrastructure and remotely collect real-time information that can provide early warning signals of a system failure. To fulfill the demand, Moxa offers IP-based modular RTU controllers and remote I/Os that are EN 50155-compliant for ruggedness. Cellular and IP-based standalone solutions are also available for the monitoring of wayside equipment. Moxa's railway data acquisition and control solutions provide the key to reducing service downtime and optimizing maintenance efficiency.

## Railway-Certified RTU Controllers and Remote I/Os

### EN 50155/50121 Modular RTUs



#### ioPAC 8000 Modular RTUs

- Modular, hot-swappable for versatile I/O module connectivity
- -40 to 75°C wide operating temperature
- Redundant power inputs with additional AC/DC modules
- 2 Ethernet M12 ports with bypass relay function
- Front-end intelligence with C programming capability

#### Available Models

ioPAC 8020-5/9-M12/RJ45/-C-T (5 slots or 9 slots, M12 or RJ45 connector, C programming, wide operating temperature)

#### Digital I/O modules

RM-1602 (16 DIs), RM-1050 (10 DIs), RM-2600 (16 DOs)

#### Analog I/O modules

RM-3802 (8 AIs), RM-3810 (8 AIs)

### EN 50155/50121 Remote I/Os



#### ioLogik E1500 Rugged Remote I/Os

- -40 to 85°C wide operating temperature
- Channel-to-channel isolation protection
- 2 built-in Ethernet switch ports for daisy-chain topologies
- Supports event-driven Active OPC technology

#### Available Models

ioLogik E1510-T (12 DIs, wide operating temperature)  
ioLogik E1512-T (4 DIs, 4 DIOs, wide operating temperature)

## Wayside Condition Monitoring RTUs

### Cellular RTU Controllers



#### ioLogik W5300 Cellular RTUs

- 3-in-1 design (cellular modem+ I/O controller + data logger)
- GSM/GPRS/HSDPA for cellular communication
- Profile-style data logging with FTP/e-mail uploads
- Multiple alarms via TCP, UDP, e-mail, SNMP trap, and SMS
- Front-end intelligence with Click&Go™ control logic
- Wide operating temperature

#### Available Models

##### GPRS Models

ioLogik W5312 (8 DIs, 4 DIOs, 8 DOs, 1 serial port)  
ioLogik W5340 (4 AIs, 8 DIOs, 2 relays, 1 serial port)

##### 3G Models

ioLogik W5340-HSDPA (4 AIs, 8 DIOs, 2 relays, 1 serial port)  
ioLogik W5348-HSDPA-C (4 AIs, 8 DIOs, 2 relays, 2 serial ports, C programming capability)

### SNMP Ethernet RTU Controllers



#### ioLogik E2200 Ethernet RTUs

- Front-end intelligence with Click&Go™ control logic
- Active messaging with real-time stamp, including SMS, SNMP trap with I/O status, TCP, UDP, and e-mail
- Support for SNMPv1/v2c/v3 protocol
- I/O peer-to-peer function
- MXIO programming library for Windows, WinCE VB/VC.NET, and Linux C APIs

#### Available Models

##### Digital I/O Modules

ioLogik E2210 (12 DIs, 8 DOs)  
ioLogik E2212 (8 DIs, 8 DOs, 4 DIOs)  
ioLogik E2214 (6 DIs, 6 relays)

##### Analog I/O Modules

ioLogik E2240 (8 AIs, 2 AOs)  
ioLogik E2242 (4 AIs, 12 DIOs)

##### Temperature Modules

ioLogik E2260 (6 RTDs, 4 DOs)  
ioLogik E2262 (8 TC inputs, 4 DOs)

