

# IEC 60870-5-104

## Protocol Adapter for Remote Monitoring

### AT A GLANCE

- Many-to-one remote monitoring protocol adapter
- Secure remote monitoring communications
- Reduced complexity and maintenance with a higher level of security than industrial firewalls
- Supported on select Owl data diode products (see below)

### KEY FEATURES

- Secure, one-way IEC 104 data transfer for remote monitoring
- Payload-only transfer – no routing information is passed between Source and Destination networks
- Menu-based system administration and configuration
- IEC 60870-5-104 log file export for easy log viewing and administration
- Supports up to 20 simultaneous data channels

### SUPPORTED OWL DATA DIODES

- OPDS-100
- OPDS-100D
- OPDS-1000
- EPDS
- ReCon

## Many-To-One Remote Monitoring

IEC 60870-5-104 (IEC 104) is a many-to-one remote monitoring communication industrial protocol. Utilized by a variety of Critical Infrastructure verticals, IEC 104 is commonly used for telecontrol equipment and systems that require data transmission for monitoring geographically widespread practices remotely.

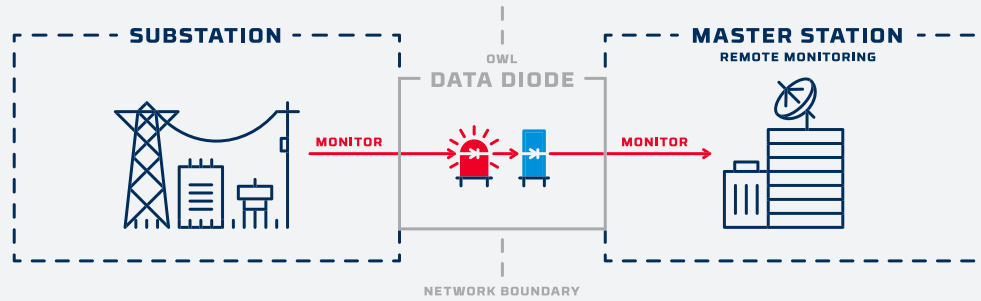
## Secure IEC 104 Communications

Any application utilizing the IEC 104 protocol will have a master (controlling station) and one or more slaves (controlled stations). The master controlling station will constantly monitor the data from each slave in the network. The power transmission and distribution industry has a need to secure the communications between their master control station and their slaves, however, IEC 104 is inherently un-secure. When IEC 104 is paired with an industrial firewall, it is susceptible to attacks. Combining IEC 104 with a hardware-enforced Owl data diode secures IEC 104 remote monitoring communications for power transmission and distribution organizations.

## Combine IEC 104 with a Data Diode

Unlike industrial firewalls, the IEC 104 protocol combined with an Owl data diode, provides hardened security that cannot be hacked. With less maintenance compared to industrial firewalls, this combined solution is the most effective method for power transmission and distribution organizations to securely collect monitoring data from their substations.

## IEC 104 REMOTE MONITORING



## Owl Vendor, Application, and Protocol Support

Owl products allow users to streamline their operations by supporting a variety of vendors, applications, data formats, and protocols to send data securely.

### VENDORS

- ABB
- Cisco
- Dell
- General Electric
- Honeywell
- IBM
- Industrial Defender
- Mitsubishi
- OSIsoft
- PAS Alarm Company
- Rockwell Automation
- Rockwell Collins
- Rolls Royce
- Schneider Electric
- Scientech
- Siemens
- Stratus
- Symantec
- Tripwire

### APPLICATIONS

- FoxGuard Patch Management
- GE Historian
- GE OSM Support
- PAS Alarm Management
- Schneider Electric
- AVEVA Wonderware eDNA Historian
- Scientech R\*Time
- OSIsoft PI System
- Rockwell Automation RSLinx Classic
- Rockwell Automation FactoryTalk Gateway
- Rockwell Automation FactoryTalk – Historian
- Rolls Royce PMS

### NATIVELY SUPPORTED PROTOCOLS

- Email (SMTP)
- FTP
- Remote File Transfer
- SNMP Traps
- Syslog
- TCP
- UDP Unicast
- UDP Multicast
- UDP Broadcast

### AVAILABLE PROTOCOL ADAPTERS

- DNP3
- HTTP
- ICCP
- IEC-104 Monitoring
- Modbus
- OPC A&E
- OPC DA
- OPC UA
- Remote HMI Screen Replication
- SQL Database Replication
- SFTP

## OWL Cyber Defense

Owl Cyber Defense Solutions, LLC leads the world in data diode and cross domain network cybersecurity. With a constant focus on customers in the military, government, critical infrastructure, and commercial communities, Owl develops market-first, one-way data transfer products to meet a variety of operational needs, from entry level to enterprise.

For more information on Owl, or to schedule a demo, visit [www.owlcyberdefense.com](http://www.owlcyberdefense.com)



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