

Real-Time Remote Data Access

Get your data anywhere in real-time using OPC UA

Extensive RTU Data Access

Available RTU data includes all analog inputs, analog outputs, digital inputs, relay outputs, pumps, pulsed flows, rain, solar, battery, AC power, Dallas electronic key, temperature, and unit status including unacknowledged alarms. Over 240 available data nodes and methods for each RTU based on configuration.

Real-Time Live Data

Latest data is available on initial login and live data is available as soon as the RTU reports it. Daily and hourly statistics are accessible as soon as they are computed.

Control of RTU Data

Beyond reading or monitoring data, Mission Communications OPC UA offers the ability to control each RTU by setting analog outputs and output relay states. Moreover, unacknowledged alarm count can be accessed and all alarms acknowledged.

Latest OPC Standards and Features

Mission Communications OPC UA Server uses the newest Unified Architecture standard from the OPC Foundation version 1.04 and supports advance OPC features like methods and local discovery server (LDS). Complicated legacy technologies like COM/DCOM are eliminated while reliability, speed, maintainability, scalability, redundancy, and security are enhanced and upgraded.

Advance Multilevel Security

Mission Communications OPC UA Server offers unparalleled security in authentication, authorization, encryption, and data integrity.

- **Authentication** with X.509 certificates for both client and server before connection is allowed.
- **Session Encryption** where all messages are encrypted with 128 or 256 bit encryption before transmission.
- **Message Signing** where all messages are signed to ensure that they are received exactly as they are sent.
- **Sequenced Packets** reduce opportunities for message reply attacks.
- **User Access Control** requires user authentication before a connection can be established and further restricts access to individual data nodes.
- **Auditing and Logging** of all user activities.

Effortless Connection

Mission Communications OPC UA Server runs remotely without within the Mission Communications infrastructure. There is nothing to install locally beyond an OPC UA client and all communication is done over standard TCP greatly simplifying firewall settings while enhancing performance and security.

Multi-Platform Support

Since Mission Communications OPC UA Server runs remotely and no longer depends on legacy COM/DCOM technologies, it can communicate with OPC UA clients running on any platform or operating system including but not limited to any version of Microsoft Windows including 10 and XP, Linux, UNIX, Mac OS, and even mobile systems like Android.

Convenient OPC Classic Support

For HMIs without a native OPC UA client, a third-party middleware called UA Proxy can be employed to translate data between OPC UA server and OPC Classic client. This software is widely available from multiple manufactures with a range of features and prices.

The following UA Proxy solutions have been tested and verified as working with Mission Communications OPC UA Server:

- **Keeware KEPServerEX 5/6 Communications Suite** offers an OPC UA client package that allows secure communication with OPC UA Server including live data changes.
- **Matrikon MatrikonOPC UA Proxy** allows secure communication with OPC UA Server including live data changes.
- **Unified Automation UaGateway** allows secure communication with OPC UA Server including live data changes and timestamp updates without data. It also supports Windows XP SP3 and Windows Vista.
- **Softing OPC dataFEED OPC Suite** allows secure communication with OPC UA Server including live data changes with added features like database logging.
- **Cogent DataHub** allows secure communication with OPC UA Server including live data changes with added features like scripting.

Technical Specifications

Specifications	
OPC UA Protocol	1.04 opc.tcp
Security	
Authentication	X.509 Version 3 Certificate (Required)
Security Policy	Basic256Sha256 Basic256 Basic128Rsa15 (not recommended) None (not recommended)

Encoding	Binary
Message Security Mode	Sign & Encrypt Sign None (not recommended)
User Token Type	Username Anonymous (no RTU data access)
Endpoint *	
URL	opc.tcp://opcua.123mc.com:4840/
Port	4840

* Subject to change