

# Modbus Suite

## SKU: KWP-MDBUS0-PRD

### Component Drivers

- Modbus ASCII
- Modbus Ethernet
- Modbus Plus
- Modbus Serial
- Modbus Unsolicited Serial

### Features

#### SUPPORTED DEVICES AND NETWORKS

- TCP/IP Ethernet (Master/Slave)
- RTU Serial (Master/Slave)
- ASCII Serial
- Modbus Plus
- Enron
- Omni
- Daniel
- Instromet
- Dynamic Fluid Meters
- Roxar RFM
- Mailbox
- Elliot
- Fluenta FGM
- DGH DAQ

**Note:** This is a partial list; unlisted devices may be supported. For a complete listing, please contact Kepware.

#### ADDITIONAL TECH INFO

- Zero-based & one-based addressing
- Adjustable Block Reads (1-125)
- Byte Order Swapping (Modbus or Intel)
- Holding Register Bit Mask Writes
- "Modified" Modbus support (flow computers)
- Modbus TCP Framing for Modbus RTU Serial
- Support for Modbus TCP or UDP-enabled devices
- Multi-Threaded Design (Windows Sockets)

#### Application Support

- OPC Data Access (OPC DA) Versions 1.0a, 2.0, 2.05a, and 3.0
- OPC Alarms and Events (OPC AE) Version 1.10
- OPC Unified Architecture (OPC UA) Version 1.01
- OPC .NET Service (OPC .NET) Version 1.00
- SuiteLink and FastDDE for Wonderware
- NIO Interface for iFIX
- DDE Format CF\_Text and AdvancedDDE

# Modbus ASCII

## Product Overview

The Modbus ASCII driver works in conjunction with KEPServerEX to provide an easy and reliable way to connect to Modbus ASCII compliant PLCs and other devices to your OPC client applications, including HMI, SCADA, Historian, MES, ERP, and countless custom applications.

## Features

- Ethernet Encapsulation
- Modbus ASCII Multi-drop Supported
- Full Address Range Support (0 - 65535)
- User Definable Read Block Sizes
- Adjustable Address Base (0 or 1)
- Word Order Swapping for Floating Point and Longs
- RTU Functions used: 01, 02, 03, 04, 05, 06, 16
- Direct Support of Flow Automation flow computers
- All memory types and data types supported
- Modem Support
  - Automatic Dial Configuration
  - Multiple Phone Number Management
- Communication Serialization

## Protocols

- Modbus ASCII

## Supported Devices

- Flow Computers
- Any Device Supporting Modbus ASCII
- Any Modbus ASCII Compliant PLC

## Featured Suites

- Building Automation Suite
- IT and Infrastructure Suite
- Manufacturing Suite
- Modbus Suite
- Oil and Gas Suite
- Power Suite

# Modbus Ethernet

## Product Overview

The Modbus Ethernet device driver works in conjunction with KEPServerEX to provide data exchange between OPC clients and Modbus Ethernet protocol compliant PLCs. KEPServerEX automatically optimizes your data acquisition based on client demand. Data integrity is ensured with our extensive error handling.

Kepware's implementation of the Modbus Ethernet driver supports master and slave operations simultaneously. The slave mode allows the server to receive data by exception from other Modbus Ethernet devices.

The Modbus Ethernet driver now offers direct integration with Modicon Concept and ProWORX programming packages. If you are using either of these packages, you will be able to directly import the tags used in your PLC application directly into KEPServerEX. This time-saving step instantly makes all of the relevant PLC data available to your OPC client applications.

## Features

- Automatic Tag Generation
- Supports Multiple PLCs via IP addressing
- Supports Modicon Ethernet to Modbus Plus bridging
- Supports Multiple or Single socket usage for better gateway resource management
- Supports Tag import from Concept and ProWORX programming packages
- Supports Advanced Statistics Tags, including \_CommFailures and \_ErrorResponses
- Supports Memory Accesses to 65535
- Hex Addressing Support (0-FFFF)
- User Definable Read Block Sizes
- Adjustable Address Base (0 or 1)
- Word Order Swapping for Floating Point and Longs
- 0xxxx - Output Coils, 1xxxx - Input Coils, 3xxxx - Internal Registers, 4xxxx - Holding Registers
- All data types and arrays are supported

## Protocols

- Modbus Ethernet

## Supported Devices

- Applicom: Generic Modbus, TSX Premium, TSX Quantum
- Mailbox
- Fluenta FGM
- Roxar RFM
- Instromet
- Modbus Ethernet

## Featured Suites

- Building Automation Suite
- IT and Infrastructure Suite
- Manufacturing Suite
- Modbus Suite
- Oil and Gas Suite
- Power Suite

# Modbus Plus

## Product Overview

The Modbus Plus device driver works in conjunction with KEPServerEX to provide data exchange between OPC clients and Modbus Plus protocol compliant PLCs. KEPServerEX automatically optimizes your data acquisition based on client demand. Data integrity is ensured with our extensive error handling.

Keeware's implementation of the Modbus Plus driver supports master and slave paths simultaneously. The slave mode allows the server to receive data by exception from other Modbus Plus devices. Up to eight simultaneous slave paths are supported for maximum unsolicited message processing throughput.

The Modbus Plus driver now offers direct integration with Modicon Concept and ProWORX programming packages. If you are using either of these packages you will be able to import the tags used in your PLC application directly into KEPServerEX. This time-saving step instantly makes all of the relevant PLC data available to your OPC client applications.

## Features

- Automatic Tag Database Generation
- Supports tag import from Concept and ProWORX programming packages
- SA85-PCMCIA (Windows 95 only)
- Supports up to four SA85 cards in one PC
- Supports Multiple Access Paths per card
- Modicon X84 w Modbus Plus features
- Modicon TIO Remote I/O Modules
- Supports Memory Accesses to 65535
- 0xxxx - Output Coils, 1xxxx - Input Coils, 3xxxx - Internal Registers, 4xxxx - Holding Registers
- Supports accessing Holding Register memory as string data with HiLo/LoHiByte ordering
- All data types and arrays are supported
- Order Modicon part # "SW-LNET-INT" or "SW-LNET-I95"

## Protocols

- Modbus Plus

## Supported Devices

- AT-984 Programmable Controller Board
- Hilscher CIF Card
- Modbus Plus ISA PC Adapter Card
- Modbus Plus PCI PC Adapter Card
- Modbus Plus Type II PCMCIA Card
- Modbus Plus Type III PCMCIA Card
- Modbus Plus Type III PnP PCMCIA Card
- SA85 (-002 and -001) PC Interface Cards
- SA85-PCI

## Additional Tech Info

### SUPPORTED DEVICE DETAILS

- Modbus Plus ISA PC Adapter Card - Schneider part#: AM-SA85-030
- Modbus Plus PCI PC Adapter Card Schneider part#: 416 NHM 300 30
- Modbus Plus Type II PCMCIA Card - Schneider part#: 416 NHM 212 30
- Modbus Plus Type III PCMCIA Card - Schneider part#: 416 NHM 212 33

- Modbus Plus Type III PnP PCMCIA Card - Schneider part#: 416 NHM 212 34
- Hilscher CIF Card - For this configuration, the driver requires Hilscher's SyCon configuration software to be installed on the same machine as the card. Also, configuration of the card is performed and downloaded through SyCon.

## **Featured Suites**

- Manufacturing Suite
- Modbus Suite

# Modbus Serial

## Product Overview

The Modbus Serial device driver works in conjunction with KEPServerEX to provide data exchange between OPC clients and Modbus Serial protocol compliant PLCs and other devices. KEPServerEX automatically optimizes your data acquisition based on client demand. Data integrity is ensured with our extensive error handling.

Special handling has been added to support the native memory formats of the OMNI Flow Computer including string support. Additional configuration parameters allow this driver to be tailored to a wide range of Modbus Serial compatible devices, including JBUS.

The Modbus Serial driver now offers direct integration with Modicon Concept and ProWORX programming packages. If you are using either of these packages, you will be able to import the tags used in your PLC application directly into KEPServerEX. This time-saving step instantly makes all of the relevant PLC data available to your OPC client applications.

## Features

- Ethernet Encapsulation
- Supports the TSXCUSBMBP USB adapter for the Modbus Plus Network
- Modbus RTU Multi-drop Supported
- Automatic Tag Generation
- Supports Broadcast Messages using device ID 0
- Full Address Range Support (0 - 65535)
- Hex Addressing Support (0-FFFF)
- User Definable Read Block Sizes
- Adjustable Address Base (0 or 1)
- Word Order Swapping for Floating Point and Longs
- Byte Order Swapping on all 16 bit and 32 bit values
- Adjustable RTS Flow timing for Radio Modems
- Supports all memory types and data types
- Support accessing Holding register memory as string data with HiLo/LoHi byte order
- RTU Functions used: 01, 02, 03,04, 05, 06, 16
- Supports tag import from Concept and ProWORX programming packages
- Modem Support
  - Automatic Dial Configuration
  - Multiple Phone Number Management
- Communication Serialization

## Protocols

- Modbus RTU Protocol

## Supported Devices

- Modbus Compatible Devices
- Elliot Flow Computer
- Magnetek GPD 515 Drive
- Omni Flow Computer (Enron Modbus)
- Daniel S500 Flow Computer
- Dynamic Fluid Meter
- TSXCUSBMBP USB Adapter

## **Featured Suites**

- Building Automation Suite
- IT and Infrastructure Suite
- Manufacturing Suite
- Modbus Suite
- Oil and Gas Suite
- Power Suite

# Modbus Unsolicited Serial

## Product Overview

The Modbus Unsolicited Serial device driver works in conjunction with KEPServerEX to provide data exchange between OPC clients, Modbus Masters, and Modbus RTU networks. The Modbus Unsolicited Serial (slave) driver allows a OPC client application to appear as 1 to 247 Modbus RTU devices on the network. The slave mode allows the server to receive data by exception from a Modbus RTU master. Typical applications include connectivity with larger DCS systems that utilize Modbus RTU. As with any slave device, the Modbus RTU Slave driver will only transfer data when being read or written by a RTU master. Data integrity is ensured with our extensive error handling.

## Features

- Word Order Swapping for Floating Point and Longs
- Modbus RTU Multi-drop Supported
- Full Address Range Support (0 - 65535)
- Hex Addressing Support (0-FFFF)
- Can appear as Multiple Modbus Slave devices
- Data Modbus RTU functions accepted by Slave: 01, 02, 03, 04, 05,
- Adjustable Address Base (0 or 1)
- Station numbers selectable from 1-247

## Protocols

- Modbus RTU Protocol

## Supported Devices

- Any Modbus compatible devices

## Featured Suites

- Manufacturing Suite
- Modbus Suite