KLINKMANN

Product Data Sheet

MODBUS Master/Slave Serial&Ethernet Communication Server, TCP (GPRS) Server version

The Klinkmann **MODBUS Master/Slave Serial&Ethernet Communication Server, TCP (GPRS) Server version** is a Microsoft Windows application program that acts as a communication protocol *Server* and allows other Windows application programs access to data from MODBUS network using the TCP/IP interface (in TCP Server mode only) and the RS-232C serial interface. In **TCP Server mode** special functionality is implemented to support the **GPRS** wireless communications. The Server can act either as a MODBUS master device or a MODBUS slave device.

Any Microsoft Windows program that is capable of acting as a DDE, FastDDE, SuiteLink or OPC *Client* may use the MODBUS Master/Slave Server.

There are following MODBUS Master/Slave Serial&Ethernet Server versions available:

- MODBUS Master/Slave Serial&Ethernet DDE & Suite Link Server,
- MODBUS Master/Slave Serial&Ethernet OPC & DDE Server.

FEATURES

The **OPC** support for MODBUS Master/Slave Serial&Ethernet Server OPC & DDE version conforms to OPC Data Access Custom Interface Specification 2.04. The MODBUS Server OPC & DDE version is tested for compliance and is compatible with OPC Foundation OPC Data Access Compliance Test Tool.

The MODBUS Server DDE & Suite Link version supports the Wonderware **Suite Link** communication protocol.

Supports the following communication options:
- **Standard Modbus/TCP** protocol, in case communicating directly with device supporting Modbus TCP protocol, without CRC (Cyclical Redundancy Checksum) included;
- **Serial/Ethernet** option, in case serial device is accessed via serial/TCP Ethernet converter or GPRS-modem; in this option the 6-bytes header **is not included** in TCP/IP packet (CRC is included), it is suitable for GPRS communication by using serial/TCP direct conversion at serial device side;
- special **TCP Modbus/IP + CRC** feature, in case serial device is accessed via GPRS-modem (or serial/TCP Ethernet converter) with embedded application running on it; in this option both the 6-bytes header and CRC **are included** in TCP/IP packet, it is suitable e.g. for GPRS communication by using **Klinkmann GPRS application** running on GPRS-modem at serial device side.

The Server is intended for serial communication with any devices supporting standard MODBUS binary (RTU, 8-bit) protocol. Connected Modbus devices can be either MODBUS Slaves or MODBUS Masters.

For write commands the selection from two different function types can be done: single coil/register write commands (functions 5 and 6) or multiple coil/register write commands (functions 15 and 16).

Supports both 5-digit and 6-digit addressing.

Support for PLC limited address fields, by using special valid addresses ASCII file.

Modbus Function 8 (Diagnostics) support.

Minimizes system message traffic by dynamically calculating and optimizing poll lists for client-requested items/points.

Supports multiple topics for each PLC, allowing different data update rates.

Provides a communication status flag for each topic.

Supports standard DDE among multiple applications.

SPECIFICATIONS

Hardware: For effective use the following is recommended - CPU: 586 133 MHz or faster, 32MB RAM or more. May require more memory to run other Windows programs simultaneously.

Software: MS Windows XP, Windows 2003 Server, Windows 7, Windows Vista and Windows 2008 Server.

Maximum Connections: Up to 255 Modbus devices can be connected to each serial port.

Devices Supported: Any device supporting MODBUS binary (serial and Ethernet) protocol.

Accessible Data Types: Within the MODBUS Master/Slave Server, the standard Modicon MODBUS protocol item/point naming is used. The point name consists of five or six digits with optionally used suffix (e.g. character S or s for signed Word indication). The first digit states the memory area the point belongs to. The rest four or five digits are the point address in the memory area.

There are following memory areas available (5-digit / 6-digit addressing):

Binary outputs and binary memories, Read/Write, addresses 00001 - 09999 / 000001 - 065535

Binary inputs, Read Only, addresses 10001 - 19999 / 100001 - 165535

Register outputs and register memories, Read/Write, addresses 40001 - 65000 / 400001 - 465535

Register inputs, Read Only, addresses 30001 - 39999 / 300001 - 365535

Extended Memory Registers, addresses 600001 - 69xxxx

ORDERING INFORMATION

Description / Order Number

MODBUS Master/Slave Serial&Ethernet DDE&Suite Link Server Manual & Disk Set / DR380 10

MODBUS Master/Slave Serial&Ethernet OPC&DDE Server Manual & Disk Set / DR380 11