



Product Data Sheet

OMRON Ethernet Direct Communication Server

The Klinkmann **OMRON Ethernet Direct Communication Server (OMRONETH)** is a Microsoft Windows application program that acts as a communication protocol *Server* and allows other Windows application programs to access the data directly from OMRON Programmable Controllers (PLCs) over the OMRON *Ethernet* network, no additional Omron software needed. The OMRONETH Server requires an Ethernet card and TCP/IP protocol installed on the computer to communicate with the Ethernet network. The OMRONETH Server can access the data from Controllers connected to the *Ethernet System* directly (with *Ethernet Unit* installed) or from Controllers interconnected to *Ethernet System* through SYSMAC NET network or SYSMAC LINK network (through *PC Gateway* - an OMRON Controller which has multiple Communications Units mounted (which includes the *Ethernet Unit*) and therefore that belongs to two networks and can thus function as an interface between them).

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

There are following OMRONETH Server versions available:

- OMRONETH SuiteLink & DDE Server,
- OMRONETH OPC & DDE Server.

FEATURES

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

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

Communicates with OMRON PLCs connected to the Ethernet network directly or interconnected through SYSMAC NET or SYSMAC LINK.

Supports PLCs Memory Areas accessible by FINS communications commands.

Supports separate sockets for directly (with Ethernet Unit installed) connected PLCs, thus allowing parallel processing for these PLCs.

Minimizes system message traffic by dynamically calculating and optimizing poll lists to read only, client-requested items/points.

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

Provides a communication status flag for each topic.

Supports standard DDE among multiple applications.

SPECIFICATIONS

Hardware: Any hardware platform supporting MS Windows 7 and later MS Windows operating systems.

Software: MS Windows XP, Windows 2003 Server, Windows 7, Windows 2008 Server, Windows 2012 Server. Windows Sockets (WINSOCK.DLL) interface.

Computer Interface Any network card supporting the Ethernet network.

Maximum Connections Up to 126 nodes from Ethernet or SYSMAC NET networks and up to 62 nodes from SYSMAC LINK network.

Devices Supported OMRON CS1/CJ1-series, C200HX/C200HG/C200HE, CV-series and C-series (only interconnected) PLCs.

Accessible Point Types The following are supported Item/Point Types:

CV-Series

- CIO area
- G area
- Auxiliary Relay area
- Timer Completion flags
- Counter Completion flags
- Timer Present Value
- Counter Present Value
- Data Memory area
- Transition Area flags
- Step Area Flag status
- Step Area status
- Step timer Present Value
- Expansion area (Current bank)
- Action Area Flag status
- Register Area contents IR
- Register Area contents DR

Note: The following CV-Series point types are **Read only**: Timer Completion flags, Counter Completion flags, Transition Area flags, Step Area Flag status, Step Area.

All other point types are **Read/Write**.

C-Series

- Input/Output register area
- Latching Relay area
- Holding Relay area
- Auxiliary Relay area
- Completion flags for Timers/Counters
- Present Values for Timers/Counters
- Data Memory area

Note: All C-Series point types are Read/Write, except Completion flags for Timers/Counters, which type is Read Only.

C200HX/C200HG/C200HE

- Internal Relay area 1, 2
- Special Relay area 1, 2

Link Relay area
Holding Relay area
Auxiliary Relay area
Timer/Counter area
Data Memory area
Extended Data Memory area (current bank only)

CS1/CJ1-Series

CIO area
Work area
Holding area
Auxiliary area
Temporary Relay area
Data Memory area
Extended Data Memory area (current bank only)
Completion flags for Timers/Counters
Timer/Counter PVs
Index Registers
Data Registers (CS1 only)

ORDERING INFORMATION

Description / Order Number

OMRON Ethernet Direct DDE & Suite Link Server Manual & Disk Set / DR 170 10

OMRON Ethernet Direct OPC & DDE Server Manual & Disk Set / DR 170 11

KLINKMANN

www.klinkmann.com

Helsinki

tel. +358 9 540 4940
automation@klinkmann.fi

St. Petersburg

tel. +7 812 327 3752
klinkmann@klinkmann.spb.ru

Moscow

tel. +7 495 641 1616
moscow@klinkmann.spb.ru

Yekaterinburg

tel. +7 343 287 19 19
yekaterinburg@klinkmann.spb.ru

Samara

tel. +7 846 273 95 85
samara@klinkmann.spb.ru

Kiev

tel. +38 044 495 33 40
klinkmann@klinkmann.kiev.ua

Riga

tel. +371 6738 1617
klinkmann@klinkmann.lv

Vilnius

tel. +370 5 215 1646
post@klinkmann.lt

Tallinn

tel. +372 668 4500
klinkmann.est@klinkmann.ee

Minsk

tel. +375 17 200 0876
minsk@klinkmann.com