



Part type designation	Part number
MMS Client download	00017952-xx
MMS Client RT	00017952-63
MMS GSV Client RT	00024328-63
MMS Client/Server RT	00020316-63
MMS GSV Client/Server RT	00026409-63

MMS Client

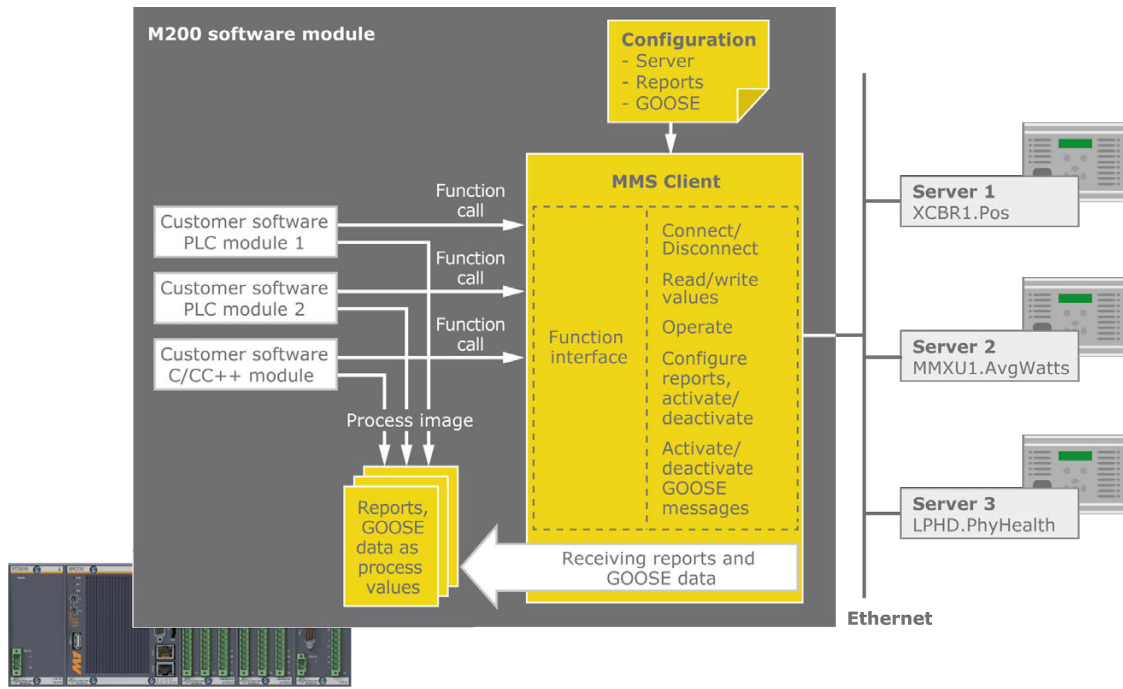
GOOSE Subscriber / IEC 61850, IEC 61400-25 Manufacturing Message Specification Client

Numerous switching, protective, and measurement devices in the energy technology area are equipped with an Ethernet interface and offer communication in accordance with the IEC 61850 standard. Via this interface, parameters can be assigned for the devices regardless of manufacturer, the devices can be diagnosed, and actual values can be picked up through polling or received per report or GOOSE.

Through the Bachmann MMS Client, the M200 control system is capable of operating and monitoring such devices. The MMS Client behaves on the controller in a manner similar to a fieldbus driver: It supplies actual values of the peripheral devices, which are received as reports or GOOSE messages, directly to the application software. Here they are available in the process image. In the control direction, switch commands, set values, and parameters for the peripheral device can be set directly from the application program.

Features

- Entirely software-based solution; no special additional hardware necessary. Suitable for all M200 CPU types except ME203
- It is started as a stand-alone service directly from the application software
- Allows joint operation with other protocols on the same Ethernet port and in the same network
- Configuration via SolutionCenter, no external tools necessary
- Operates devices in accordance with IEC 61850 and/or IEC 61400-25 in the same network
- Control interface for sequential programs (IEC 61131-3, C/C++) with background execution for scheduled de-coupling
- Library for PLC programming in accordance with IEC 61131-3
- Header file for C/C++ programming
- Monitor for general read/write queries in the SolutionCenter
- Open interface for tools and visualization
- Data from reports and GOOSE messages are available via logical I/O modules for application programs and tools



▼ MMS Client as peripheral device interface

MMS Client (IEC 61850 / IEC 61400-25)

Usability	
Implementation areas	Operation and monitoring of switchgear and protection devices in accordance with IEC 61850-7 Communication with distributed energy resources in accordance with IEC 61850-7-420, e.g. CHP, photovoltaic, thermal storage Communication with wind energy devices and plants in accordance with IEC 61400-25, e.g. wind turbines, meteorological measuring instruments
Scope of delivery	Software components for the controller PLC library and C/C++ header for operation of the API Test and diagnostics monitor in the SolutionCenter User manual Example configuration PLC sample project
User interface for IEC 61131-3	Display of data in the process image via report or GOOSE Individual read and write commands via non-blocking function blocks (PLC) or non-blocking calls (C/C++)
User interface for C/C++	Non-blocking functions for calls and replies; header file with required definitions
Features according to IEC 61850 / IEC 61400-25	
Login / log off on the external server with or without password	Associate, Abort, Release
Check connection status	MMS status request
Read value from data attributes	GetDataValues
Write value from data attributes	SetDataValues
Activation and configuration buffered and unbuffered reports (BR, RP)	Get/SetBRCBValues, Get/SetURCBValues, BRCB etc. Buffered report control block
Generating, deleting, and reading datasets	CreateDataSet, DeleteDataSet, GetDataSetDirectory
Sending of switch commands (operates)	Select, Select with value, Operate, Cancel, TimeActivatedOperate Receipt of information reports as reaction to operates with enhanced security

Order data

Part type designation	Part number	Description
MMS Client download	00017952-xx	Software and documentation for the MMS Client. Enables the engineering software to access external devices via the Ethernet interface using the standard IEC 61850 or IEC 61400-25. Without a valid Runtime License the MMS Client runs only temporarily for 2 h in demo mode.
MMS Client RT	00017952-63	License to operate the MMS Client on one controller CPU. Provides communication over the Ethernet interface with standards-compliant servers using the IEC 61850 or IEC 61400-25 protocol in accordance with the compatibility documentation.
MMS GSV Client RT	00024328-63	License to operate the MMS Client on one controller CPU. Provides communication over the Ethernet interface with standards-compliant servers using the IEC 61850 incl. GOOSE subscriber or IEC 61400-25 protocol in accordance with the compatibility documentation.
MMS Client/Server RT	00020316-63	License for the combined operation of the MMS Server and Client on one controller CPU. Provides communication over the Ethernet interface with standards-compliant remote stations using the IEC 61850 or IEC 61400-25 protocol in accordance with the compatibility documentation.
MMS GSV Client/Server RT	00026409-63	License for the combined operation of the MMS Server and MMS Client incl. GOOSE Publisher and Subscriber on one controller CPU. Provides communication over the Ethernet interface with standards-compliant remote stations using the IEC 61850 or IEC 61400-25 protocol in accordance with the compatibility documentation.