



| Part type designation | Part number |
|--------------------------------|-------------|
| OPC-DA-ETP-Server RT | 00015632-63 |
| OPC Enterprise Server Download | 00015632-90 |



OPC Enterprise Server

Openness, productivity and connectivity

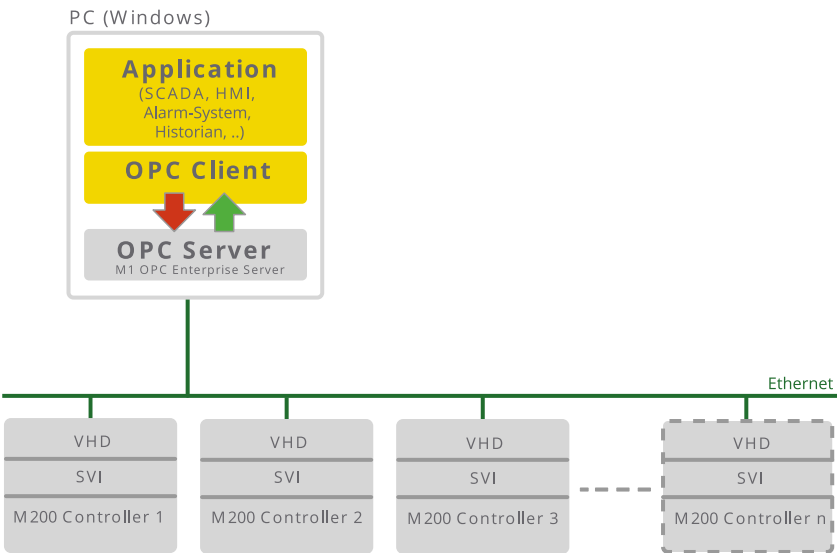
OPC defines a number of manufacturerneutral software interfaces for automation (→ www.opcfoundation.org). With OPC Data Access, current states and values (online data) can be exchanged between controllers and software applications, such as visualizations, control systems or production data acquisition. As a pure software interface OPC runs on a PC or IPC under Windows and communicates with the M200 automation systems via Ethernet. Any standard-conformant OPC client which is operated on the PC can exchange process data in both directions.

The integrated configuration tool supports the selective disclosure of any variables from the control system under a freely selectable item name for the clients. Configurations can either be created directly in the graphical user interface, or transferred from other tools via the import/export function. Convenient copy functions accelerate the configuration or management even for large installations with many connected controllers. The integrated simulation enables communication tests with client applications even without connected M200 systems. Inversely a test client that is likewise integrated in the "OPC Configurator" configuration tool permits checking of the data exchange with underlying controllers without a completely set-up OPC client application. The Bachmann OPC Enterprise Server has been specially developed for large installations with a variety of automation devices, i.e. for large data volumes. In addition to the possibility of handling multiple network connections simultaneously, here the parallelization of queries and the multi-processor support have a particular effect.

Features

- OPC-conformant data server – manufacturer-neutral interface
- Specifications: OPC Data Access 1.0, 2.04, 2.05 and 3.0
- Connection to M200 via Ethernet
- Secure SSL connection to the controllers
- No restriction of the connected M200 systems and data quantity (items) ¹⁾
- Multi-processor support
- Powerful configuration tool
- Flat and hierarchical browsing
- Simulation for clients (configuration tool)
- Integrated test client (configuration tool)
- Operation under Windows 10, 11 and Windows Server 2016, 2019 and 2022

¹⁾ However there is restriction due to computer performance, network capacity and communication load on the M200 system. The actual achievable throughput depends on the application case.



OPC Enterprise Server

| Server | | |
|-----------------------------------|---|--|
| Protocol for client application | OPC Data Access | |
| Supported specifications | V1.0, 2.04, 2.05a, 3.0 | |
| Data exchange direction | Bidirectional | |
| Supported data types | Basis types | UINT1, UINT8, SINT8, UINT16, SINT16, UINT32, SINT32, REAL32, BOOL8, CHAR8, CHAR16, MIXED, REAL64, UINT64, SINT64 |
| | Block types | All basis types; basis type + BLK (e.g. CHAR8 + BLK = STRING) |
| Data type mapping | SVI on OPC (automatic) | |
| Number of variables (items) | User-defined ¹⁾ | |
| Time stamp on the server | Yes | |
| Time stamp from controller | Yes (per group one time item possible) | |
| Quality attribute on the server | Yes | |
| Quality attribute from controller | Yes (per group one quality item possible) | |
| Display of connection loss | Yes (affected items show quality=BAD) | |
| Type of installation | OUT_PROCESS or SERVICE | |
| Operation without GUI | Yes | |
| Flat browsing | Yes | |
| Hierarchical browsing | Yes | |
| Refresh rates | Dynamically adjustable per group (from 50 ms) ¹⁾ | |
| Multi-processor support | Yes | |
| Simulation mode | Yes | |

¹⁾ Update rates depend on the data volume and the computer performance, (free) controller performance and network topology / network load.

| Interfaces to the controller | |
|--|---|
| Physical interface to the M200 | Ethernet |
| Basis protocols | TCP/IP UDP/IP QSOAP |
| Protocol | SMI/VHD |
| Multiple connections per controller | Yes |
| Simultaneous queries | Yes |
| Number of connected controllers | User-defined ¹⁾ |
| Access protection | Yes, configurable |
| Supported security levels | 0 to 4 |
| Encryption | OpenSSL |
| ¹⁾ No program-technical restriction. Limit value depends on performance of the computer, the network and the capacity utilization of the controllers. | |
| Configuration | |
| Graphical user interface | Yes (OPC Configurator) |
| Browsing of controllers | Yes |
| Browsing of controller variables (SVI) | Yes |
| Import/Export | Yes (CSV) |
| Templates | Yes |
| Clones (with enumeration) | Yes |
| Restricted access | Yes (only on configured items) |
| Item names | OPC side can be freely configured ("renaming") |
| Item access rights | OPC side can be freely restricted |
| Integrated test client | Yes |
| Configurations can be saved | Yes |
| Access protection on configuration | Yes (different user levels) |
| Diagnostics | |
| Error logging | Yes (log file) |
| Debug mode | Yes (several can be set) |
| Diagnostics on items | Yes (static items) |
| Statistics on items | Yes (static items) |
| Installation | |
| Installation medium | Installer, available as DVD or download |
| Installation can be automated ("silent") | Yes |
| License basis | Per installation (single-license obligation) |
| License protection | Hardware-dependent software key |
| Configured installation | Yes (items/controller configuration as well as configuration users can be preset) |
| System requirements for server | |
| Operating system (OPC Server) | Windows 10 Windows 11 Windows Server 2016 Windows Server 2019 Windows Server 2022 |
| Hardware | According to the requirements of the operating system, 2 GB free memory recommended |
| Microsoft .NET Framework | 3.5SP1 or higher |

System requirements M200

| | |
|-------------------------|--|
| M200 automation devices | Series ME, MX, MPC, MPE, MH, MC |
| System software | MSys V2.11 or higher (for full function scope) |

Order data

| Part type designation | Part number | Description |
|--------------------------------|-------------|---|
| OPC-DA-ETP-Server RT | 00015632-63 | License to operate one instance of the M200 OPC Enterprise Server on a Windows PC. Provides variable communication with M200 automation systems over the Ethernet interface and offers an OPC Data Access interface according to specifications 1.0, 2.04, 2.05 and 3.0 accessible by standards-compliant client software via COM/DCOM. No license restrictions on the number of connected M200 systems or process variables. |
| OPC Enterprise Server Download | 00015632-90 | OPC-DA-ETP-Server software package installer |