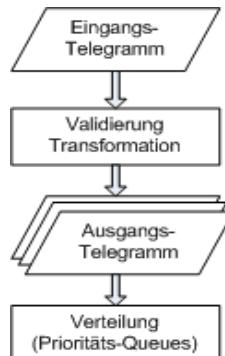


Data sheet Telegram Manager 5

07/2021

Main features

- Telegram-based data exchange with heterogeneous systems
- Support of various interface types
- Configuration of stations and telegrams
- Transformation and buffering of telegrams
- Archiving and analysis of telegram traffic and system messages
- Windows-based client-server architecture
- Increased availability through active standby system



Interfaces

The following protocols are supported in the interfaces to coupling partners:

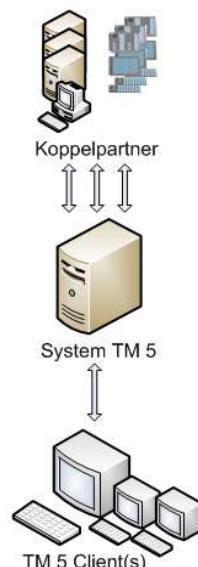
Protocol	Max. Number of connections	Max. Telegram length	Prerequisite s	TM license package
TCP/IP	(64)	(10 MB)		Base incl.
TCP/IP sniffer	(64)	(1 MB)	WinPcap	Addition TCP sniffer
Modbus over TCP/IP	(64)	200 B		Addition MB
ISO transport (H1) and ISO on TCP (RFC1006)	64	8 kB	SIEMENS SIMATIC NET	Addition ISO
IBM WebSphere MQ Database	(64) (64)	65 MB 100 MB	MQ clt/srv Oracle DB SQL Server MySQL	Addition MQS Addition DB
File	(64)	100 MB		Addition FILE

- Values in parentheses represent recommended upper limits.
- Recommended maximum total number of all connections: 64
- Size limit per telegram in TM5: 100 MB

Monitoring

The following functionalities are supported for interface monitoring.

- Cyclic live messages (input / output)
- Acknowledgement telegrams at application level
- Switching between defined stations in the event of a fault
- Publication of system status via PRTG as well as XML dump



Platforms

- Windows 7 SP1 / 8 / 8.1 / 10 (32 bit and 64 bit respectively)
- Windows Server¹: 2008 SP2+R2 SP1 / 2012 / 2012 R2 / 2016 / 2019
- Runtime environment: .NET Framework 4.5

¹ with 2008 SP2 32 bit and 64 bit is supported. Otherwise only the 64 bit edition

Telegram processing

- Reception and validation
- Configurable transformation of telegram contents
- Consideration of the byte order (endianess)
- Programming interface for customer-specific adaptations e.g. mapping, XML telegram conversions
- Priority controlled distribution
- Monitoring of validity by means of TTL (time to live)
- Buffering
- Transmit counter

Key figures

The average data throughput for stable continuous operation is: 1 MB / s

The data throughput is influenced by the following factors

- Hardware (CPU, RAM, HDD, NICs)
- Execution in real or virtualized environment
- Number of stations
- Interface protocol
- Average telegram size
- System load

Performance limits in high-cycle message processing:

- With archiving: 1 telegram every 50ms
- Without archiving: 1 telegram every 5ms

The above characteristic values were recorded with telegrams of the size of 10,000 bytes under direct forwarding of the incoming telegrams to the receiver.

Archiving

Archiving is done in individual files. The following data is archived:

- Telegram traffic (archiving can be selected separately per telegram)
- System messages (e.g. : "Connection established with station xyz")
- Logging (e.g. for error analysis)

The archive files can be transferred to an external file server. The archiving duration depends on the following factors:

- Number and size of telegrams to be archived
- Medium volume of system messages
- Medium logging volume
- Available storage capacity for archiving