Siemens TI505 – Siemens Simatic TI505 Devices

The Siemens TI505 driver implements communication with Simatic TI505 devices. For TCP/IP communication, the driver uses both CAMP and CAMP Packed Task Code messaging protocols for efficient data transfer.

Summary Information

Communication Driver Name: SimaticTI505

Current Version: 1.0.0.0

Implementation DLL: T.ProtocolDriver.SimaticTI505.dll

Protocol: CAMP and CAMP+Packed Task Code

Interface: TCP/IP

PLC types supported: Simatic TI505 and compatibles devices

Multi-threading: User configurable. Default is five threads to each network node

Max number of nodes: User defined

PC Hardware requirements: Standard PC Ethernet interface board

Supported Operands:

Data Type	Variables	Format	Read	Write
V	Memory	Short	Yes	Yes
M	Memory	Short	Yes	Yes
X	Discrete Input Packed	16bits	Yes	Yes
Y	Discrete Output Packed	16bits	Yes	Yes
C	Control Register Packed	16bits	Yes	Yes
WX	Word Input	Short	Yes	Yes
WY	Word Output	Short	Yes	Yes
TCP	Time/Counter Preset	Short	Yes	Yes
TCC	Time/Counter Current	Short	Yes	Yes
DSP	Drum Step Preset	Short	Yes	Yes
DSC	Drum Step Current	Short	Yes	Yes
DCP	Drum Count Preset	Short	Yes	Yes
STW	System Status Word	16bits	Yes	
DCC	Drum Current Count	32bits	Yes	

Channel Configuration

Protocol Type

The driver supports the protocols below:

- CAMP
- CAMP+Packed Task Code

Protocol Options

None

Settings

TCP/IP channels

NodeConnections: Defines the maximum number of parallel requests that will be sent to each node (asynchronous communication)

Node Configuration

Station Configuration

TCP/IP channels:

Station syntax: <IP address>;<Port>

Where:

- **<IP address>** = The IP address of the slave device in the network
- **<Port>** = The TCP/IP Port. Default is 1505

E.g.: 192.168.1.101;1505

Point Configuration

The syntax for the SiemensTI505 communication points is: <DataType><Address>

Where:

- **<DataType>** indicates the memory area. The valid values are:

DataType	Variables
V	Memory
M	Memory
X	Discrete Input Packed
Y	Discrete Output Packed
C	Control Register Packed
WX	Word Input
WY	Word Output
TCP	Time/Counter Preset
TCC	Time/Counter Current
DSP	Drum Step Preset
DSC	Drum Step Current
DCP	Drum Count Preset
STW	System Status Word
DCC	Drum Current Count

For more information about the valid data type, see Supported Operands.

- **<Address>** indicates the data address in the memory area, from 1 to 65535

E.g.: V100 (DataType = V, Address = 100)

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> ⚠️ **Note**
>
> For Floating Point format, select "Single DataType", and set the Modifiers column option for "WordSwap" to "True".

Troubleshoot

The status of the driver's execution can be observed through the diagnostic tools, which are:

- Trace window
- Property Watch
- Module Information

The above tools indicate if the operations have succeeded or have failed. A status of 0 (zero) means communication is successful. Negative values indicate internal driver errors, and positive values indicate protocol error codes.