

SimaticTI505 Communication Driver

This document has the specific information related to the driver configuration. For a generic explanation on Devices, Channels, Nodes and Points configuration, please refer to the reference guide.

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Section 1 – 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

Description: SiemensTI505 driver implements communication with Simatic/TI 505 devices. For TCP/IP communication the driver uses both CAMP and CAMP Packed Task Code messaging protocols for efficient data transfer.

PLC types supported: Simatic/TI 505 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	✓	✓
M	Memory	Short	✓	✓
X	Discrete Input Packed	16bits	✓	✓
Y	Discrete Output Packed	16bits	✓	✓
C	Control Register Packed	16bits	✓	✓
WX	Word Input	Short	✓	✓
WY	Word Output	Short	✓	✓
TCP	Time/Counter Preset	Short	✓	✓
TCC	Time/Counter Current	Short	✓	✓
DSP	Drum Step Preset	Short	✓	✓

DSC	Drum Step Current	Short	✓	✓
DCP	Drum Count Preset	Short	✓	✓
STW	System Status Word	16bits	✓	-
DCC	Drum Current Count	32bits	✓	-

Table 1

Section 2 – Channel Configuration

Protocol Type

The driver supports the protocols below:

- CAMP
- CAMP+Packed Task Code

Protocol Options

Settings

TCP/IP channels:

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

Section 3 – Node Configuration

Station Configuration

TCP/IP channels:

- Station syntax: <IP address> ;<Port>

Where :

<IP address> = IP address of the slave device in the network

<Port> = TCP/IP Port. Default is 1505.

E.g.: 192.168.1.101 ;1505

Section 4 – 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

Table 2

For more information about the valid data type, see the

Table 1:

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

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

Note: Select Single DataType with WordSwap equal true (Modifiers column) for float-point format.

Section 5 – Troubleshoot

The status of the driver 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 where the status 0 (zero) means success. Negative values are internal error codes and positive values are protocol error codes.

Revision History

Revision	Description	Date
A	Initial Revision	Nov,25 th 2015