

Industrial communication solutions for Windows

XTIS505T Driver Manual

Texas Instruments TI-505 PLC Series TBP Protocol Driver

Contents

XTIS505T technical specifications	2
General information.....	2
Command list	2
Read V Memory as Word	2
Read WX/WY	2
Read Drum Preset Count	2
Read Drum Current Count.....	2
Read Drum Time Base.....	3
Read Timer/Counter Preset/Current	3
Read C/X/Y	3
Read V Memory as IEEE Floats	3
Write V Memory as Word	4
Write WX/WY	4
Write Drum Preset Count	4
Write Drum Time Base	4
Write Timer/Counter Current	4
Write Timer/Counter Preset.....	5
Write C/X/Y Locked.....	5
Write V Memory as IEEE Floats	5
Write C/X/Y	5
Error messages	5
Supported devices.....	6

CPKSoft Engineering

Industrial communication drivers.

www.cpksoft.com

www.facebook.com/cpksoftengineering

cpksoftengineering@hotmail.com

phone: 54-911-45788354

1990-2012

Industrial communication solutions for Windows

XTIS505T technical specifications

General information

XTIS505T driver allows you to connect the PC to a TEXAS INSTRUMENTS PLCs, Series 505, using the TBP format (Transparent Byte Protocol).

Command list

Read V Memory as Word

Methods used to run this command:

Analog Input

Number of points accepted by this command:

1-15

Meaning of the DriverP0 parameter:

1

Meaning of the DriverP1 parameter:

Start address (1-32000). For an address greater than 1023, HMITalk1.DriverNumPoints could be limited to a lower value.

Read WX/WY

Methods used to run this command:

Analog Input

Number of points accepted by this command:

1-15

Meaning of the DriverP0 parameter:

3

Meaning of the DriverP1 parameter:

Indicates the type to read.

- 6 = WX type.

- 7 = WY type.

Meaning of the DriverP2 parameter:

Start address. For an address greater than 1023, HMITalk1.DriverNumPoints could be limited to a lower value.

Read Drum Preset Count

Methods used to run this command:

Analog Input

Number of points accepted by this command:

1-15

Meaning of the DriverP0 parameter:

5

Meaning of the DriverP1 parameter:

Start Drum number.

Meaning of the DriverP2 parameter:

Drum Step.

Read Drum Current Count

Methods used to run this command:

Analog Input

Number of points accepted by this command:

1-10

Meaning of the DriverP0 parameter:

7

CPKSoft Engineering

Industrial communication drivers.

www.cpksoft.com

www.facebook.com/cpksoftengineering

[cpksoftengineering@](mailto:cpksoftengineering@hotmail.com)

[hotmail.com](mailto:cpksoftengineering@hotmail.com)

phone: 54-911-45788354

1990-2012

Industrial communication solutions for Windows

Meaning of the DriverP1 parameter:

Start Drum number.

Meaning of the DriverP2 parameter:

Indicates the type to read.

- 0 = Read Preset Step.
- 1 = Read Current Step.
- 2 = Read Current Count of Current Step.

Read Drum Time Base

Methods used to run this command:

Analog Input

Number of points accepted by this command:

1-15

Meaning of the DriverP0 parameter:

10

Meaning of the DriverP1 parameter:

Start Drum number.

Read Timer/Counter Preset/Current

Methods used to run this command:

Analog Input

Number of points accepted by this command:

1-7

Meaning of the DriverP0 parameter:

12

Meaning of the DriverP1 parameter:

Timer/Counter (Hex).

Meaning of the DriverP2 parameter:

Indicates the type to read.

- 0 = Timer/Counter Preset.
- 1 = Timer/Counter Current.

Read C/X/Y

Methods used to run this command:

Digital Input

Number of points accepted by this command:

1-15

Meaning of the DriverP0 parameter:

18

Meaning of the DriverP1 parameter:

Indicates the type to read.

- 0 = C Type.
- 4 = X Type.
- 6 = Y Type.

Meaning of the DriverP2 parameter:

Start address. For an address greater than 1023, HMITalk1.DriverNumPoints could be limited to a lower value.

Read V Memory as IEEE Floats

Methods used to run this command:

Analog Input

Number of points accepted by this command:

1-7

Meaning of the DriverP0 parameter:

49

Meaning of the DriverP1 parameter:

Start address (1-32000). For an address greater than 1023, HMITalk1.DriverNumPoints could be limited to a lower value.

CPKSoft Engineering

Industrial communication drivers.

www.cpksoft.com

www.facebook.com/cpksoftengineering

cpksoftengineering@hotmail.com

phone: 54-911-45788354

Industrial communication solutions for Windows

Write V Memory as Word

Methods used to run this command:

Analog Output

Number of points accepted by this command:

1

Meaning of the DriverP0 parameter:

2

Meaning of the DriverP1 parameter:

Start address (1-32000).

Write WX/WY

Methods used to run this command:

Analog Output

Number of points accepted by this command:

1

Meaning of the DriverP0 parameter:

4

Meaning of the DriverP1 parameter:

Indicates the type to write.

- 6 = WX type.

- 7 = WY type.

Meaning of the DriverP2 parameter:

Start address.

Write Drum Preset Count

Methods used to run this command:

Analog Output

Number of points accepted by this command:

1

Meaning of the DriverP0 parameter:

6

Meaning of the DriverP1 parameter:

Start Drum number.

Meaning of the DriverP2 parameter:

Drum Step.

Write Drum Time Base

Methods used to run this command:

Analog Output

Number of points accepted by this command:

1

Meaning of the DriverP0 parameter:

11

Meaning of the DriverP1 parameter:

Start Drum number.

Write Timer/Counter Current

Methods used to run this command:

Analog Output

Number of points accepted by this command:

1

Meaning of the DriverP0 parameter:

13

Meaning of the DriverP1 parameter:

Timer/Counter (Hex).

CPKSoft Engineering

Industrial communication
drivers.

www.cpksoft.com

[www.facebook.com/
cpksoftengineering](http://www.facebook.com/cpksoftengineering)

[cpksoftengineering@
hotmail.com](mailto:cpksoftengineering@hotmail.com)

phone: 54-911-45788354

1990-2012

Industrial communication solutions for Windows

Write Timer/Counter Preset

Methods used to run this command:

Analog Output

Number of points accepted by this command:

1

Meaning of the DriverP0 parameter:

14

Meaning of the DriverP1 parameter:

Timer/Counter (Hex).

Write C/X/Y Locked

Methods used to run this command:

Digital Output

Number of points accepted by this command:

1

Meaning of the DriverP0 parameter:

20

Meaning of the DriverP1 parameter:

Indicates the type to write.

- 0 = C Type.

- 4 = X Type.

- 6 = Y Type.

Meaning of the DriverP2 parameter:

Start address.

Write V Memory as IEEE Floats

Methods used to run this command:

Analog Output

Number of points accepted by this command:

1

Meaning of the DriverP0 parameter:

50

Meaning of the DriverP1 parameter:

Start address (1-32000).

Write C/X/Y

Methods used to run this command:

Digital Output

Number of points accepted by this command:

1

Meaning of the DriverP0 parameter:

51

Meaning of the DriverP1 parameter:

Indicates the type to write.

- 8 = C Type.

- 6 = X Type.

- 7 = Y Type.

Meaning of the DriverP2 parameter:

Start address.

Error messages

The following list shows the possible error messages that can be returned by the driver during a failed communication in the 'Status' property.

[1005] DRIVER (Internal): Invalid driver stage

[1300] PROTOCOL (Timeout): No answer

[1433] PROTOCOL (Format): Validation error in device response

[2147] CONFIG (NumValues): Only one value can be read or written

CPKSoft Engineering

Industrial communication drivers.

www.cpksoft.com

www.facebook.com/

cpksoftengineering

cpksoftengineering@

hotmail.com

phone: 54-911-45788354

1990-2012

Industrial communication solutions for Windows

[2176] CONFIG (NumValues): Too many values (max=10)
[2188] CONFIG (NumValues): Too many values (max=15)
[2206] CONFIG (NumValues): Too many values (max=3)
[2232] CONFIG (NumValues): Too many values (max=7)
[3001] CONFIG (P0): Invalid command
[3508] CONFIG (P1): Invalid command
[3579] CONFIG (P1): Invalid type
[4001] CONFIG (P2): Invalid address
[8020] CONFIG (Remote): Address out of range
[8088] CONFIG (Remote): Data not inserted
[8089] CONFIG (Remote): Data not written
[8139] CONFIG (Remote): Fatal error detected
[8174] CONFIG (Remote): Illegal request in current PC mode
[8176] CONFIG (Remote): Illegal task code request
[8178] CONFIG (Remote): Illegal write to non-volatile program memory
[8181] CONFIG (Remote): Incorrect data sent with request
[8195] CONFIG (Remote): Invalid data sent with the command
[8196] CONFIG (Remote): Invalid operation in remote mode
[8202] CONFIG (Remote): Keylock protect error
[8242] CONFIG (Remote): Odd number of ASCII chars received
[8303] CONFIG (Remote): Request exceeds program memory size
[8306] CONFIG (Remote): Requested data not found

Supported devices

This driver can communicate with these devices, but is not necessarily limited to this list:

TEXAS INSTRUMENTS TI-525 PLC
TEXAS INSTRUMENTS TI-530C PLC
TEXAS INSTRUMENTS TI-530T PLC
TEXAS INSTRUMENTS TI-535 PLC
TEXAS INSTRUMENTS TI-545 PLC
TEXAS INSTRUMENTS TI-555 PLC
TEXAS INSTRUMENTS TI-560 PLC
TEXAS INSTRUMENTS TI-565 PLC
TEXAS INSTRUMENTS TI-565T PLC
TEXAS INSTRUMENTS TI-575 PLC

CPKSoft Engineering

Industrial communication
drivers.

www.cpksoft.com

[www.facebook.com/
cpksoftengineering](http://www.facebook.com/cpksoftengineering)

[cpksoftengineering@
hotmail.com](mailto:cpksoftengineering@hotmail.com)

phone: 54-911-45788354

1990-2012