

Industrial communication solutions for Windows

XKOYO305 Driver Manual

Koyo DL305 PLC Family Communications Driver

Contents

XKOYO305 technical specifications.....	2
General information.....	2
Command list	2
Read Timer/Counter/Data Registers in Binary Mode	2
Read Input/Output, Internal Relays and Shift Register Bits in Words and Binary Mode.....	2
Read Scratch Pad Memory in Binary Mode	2
Read Ladder Memory in Binary Mode	3
Read Communication Errors in Binary Mode.....	3
Read Input/Output, Internal Relays and Shift Register Bits in Bit Mode	3
Write Timer/Counter/Data Registers in Binary Mode	4
Write Input/Output, Internal Relays and Shift Register Bits in Words and Binary Mode.....	4
Write Scratch Pad Memory in Binary Mode	4
Write Ladder Memory in Binary Mode.....	5
Write Communication Errors in Binary Mode	5
Write Input/Output, Internal Relays and Shift Register Bits in Bit Mode.....	5
Read Timer/Counter/Data Registers in BCD Mode.....	5
Read Input/Output, Internal Relays and Shift Register Bits in Words and BCD Mode	6
Read Scratch Pad Memory in BCD Mode.....	6
Read Ladder Memory in BCD Mode.....	6
Read Communication Errors in BCD Mode.....	7
Write Timer/Counter/Data Registers in BCD Mode.....	7
Write Input/Output, Internal Relays and Shift Register Bits in Words and BCD Mode	7
Write Scratch Pad Memory in BCD Mode.....	8
Write Ladder Memory in BCD Mode	8
Write Communication Errors in BCD Mode.....	8
Error messages	8
Supported devices.....	8

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

XKOYO305 technical specifications

General information

XKOYO305 driver allows you to connect to KOYO Direct PLCs, Series 305, using DirectNet (hexa-mode) protocol.

Command list

Read Timer/Counter/Data Registers in Binary Mode

Description of this command:

Reads the timer/counter/data registers values in binary mode.

Methods used to run this command:

Analog Input

Number of points accepted by this command:

1-128

Meaning of the DriverP0 parameter:

Indicates the station number (0-90). If HMITalk1.DriverP0 = 0 then the connection is point-to-point.

Meaning of the DriverP1 parameter:

49

Meaning of the DriverP2 parameter:

Start address. In this case, HMITalk1.DriverP2 must have a value from 1 to 64 (dec.) to access PLC records 600 to 677 (octal), and a value from 65 to 128 (dec.) to access PLC records 400 to 577 (octal).

Meaning of the DriverP3 parameter:

0

Read Input/Output, Internal Relays and Shift Register Bits in Words and Binary Mode

Description of this command:

Reads the input/output, internal relays and shift register bits values in word and binary mode.

Methods used to run this command:

Analog Input

Number of points accepted by this command:

1-250

Meaning of the DriverP0 parameter:

Indicates the station number (0-90). If HMITalk1.DriverP0 = 0 then the connection is point-to-point.

Meaning of the DriverP1 parameter:

51

Meaning of the DriverP2 parameter:

Start address. HMITalk1.DriverP2 must have the 8 bit- "package number" accessed, where:

Meaning of the DriverP2 parameter:

$(n/8)+1$, where "n" is the I/O bit number (decimal) which heads each PLC group of 8 bits. For example: for the group of I/O bits from 136 to 143 (dec.):

Meaning of the DriverP2 parameter:

$(136/8)+1=18$

Meaning of the DriverP3 parameter:

0

Read Scratch Pad Memory in Binary Mode

Description of this command:

Reads the scratch pad memory values in binary mode.

Methods used to run this command:

Analog Input

Number of points accepted by this command:

1-128

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

Meaning of the DriverP0 parameter:

Indicates the station number (0-90). If HMITalk1.DriverP0 = 0 then the connection is point-to-point.

Meaning of the DriverP1 parameter:

54

Meaning of the DriverP2 parameter:

Start address.

Meaning of the DriverP3 parameter:

0

Read Ladder Memory in Binary Mode

Description of this command:

Reads the ladder memory values in binary mode.

Methods used to run this command:

Analog Input

Number of points accepted by this command:

1-128

Meaning of the DriverP0 parameter:

Indicates the station number (0-90). If HMITalk1.DriverP0 = 0 then the connection is point-to-point.

Meaning of the DriverP1 parameter:

55

Meaning of the DriverP2 parameter:

Start address.

Meaning of the DriverP3 parameter:

0

Read Communication Errors in Binary Mode

Description of this command:

Reads the communication errors values in binary mode.

Methods used to run this command:

Analog Input

Number of points accepted by this command:

1-128

Meaning of the DriverP0 parameter:

Indicates the station number (0-90). If HMITalk1.DriverP0 = 0 then the connection is point-to-point.

Meaning of the DriverP1 parameter:

57

Meaning of the DriverP2 parameter:

Start address.

Meaning of the DriverP3 parameter:

0

Read Input/Output, Internal Relays and Shift Register Bits in Bit Mode

Description of this command:

Reads the input/output, internal relays and shift register bits values in bit mode.

Methods used to run this command:

Digital Input

Number of points accepted by this command:

1-250

Meaning of the DriverP0 parameter:

Indicates the station number (0-90). If HMITalk1.DriverP0 = 0 then the connection is point-to-point.

Meaning of the DriverP1 parameter:

51

Meaning of the DriverP2 parameter:

Start address. HMITalk1.DriverP2 must have the 8 bit- "package number" accessed, where:

Meaning of the DriverP2 parameter:

$(n/8)+1$, where "n" is the I/O bit number (decimal) which heads each PLC group of 8 bits. For example: for the group of I/O bits from 136 to 143 (dec.):

Meaning of the DriverP2 parameter:

$(136/8)+1=18$

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

Meaning of the DriverP3 parameter:

0

Write Timer/Counter/Data Registers in Binary Mode

Description of this command:

Writes the timer/counter/data registers values in binary mode.

Methods used to run this command:

Analog Output

Number of points accepted by this command:

1-125

Meaning of the DriverP0 parameter:

Indicates the station number (0-90). If HMITalk1.DriverP0 = 0 then the connection is point-to-point.

Meaning of the DriverP1 parameter:

49

Meaning of the DriverP2 parameter:

Start address. In this case, HMITalk1.DriverP2 must have a value from 1 to 64 (dec.) to access PLC records 600 to 677 (octal), and a value from 65 to 128 (dec.) to access PLC records 400 to 577 (octal).

Meaning of the DriverP3 parameter:

0

Write Input/Output, Internal Relays and Shift Register Bits in Words and Binary Mode

Description of this command:

Writes the input/output, internal relays and shift register bits values in word and binary mode.

Methods used to run this command:

Analog Output

Number of points accepted by this command:

1-125

Meaning of the DriverP0 parameter:

Indicates the station number (0-90). If HMITalk1.DriverP0 = 0 then the connection is point-to-point.

Meaning of the DriverP1 parameter:

51

Meaning of the DriverP2 parameter:

Start address. HMITalk1.DriverP2 must have the 8 bit- "package number" accessed, where:

Meaning of the DriverP2 parameter:

$(n/8)+1$, where "n" is the I/O bit number (decimal) which heads each PLC group of 8 bits. For example: for the group of I/O bits from 136 to 143 (dec.):

Meaning of the DriverP2 parameter:

$(136/8)+1=18$

Meaning of the DriverP3 parameter:

0

Write Scratch Pad Memory in Binary Mode

Description of this command:

Writes the scratch pad memory values in binary mode.

Methods used to run this command:

Analog Output

Number of points accepted by this command:

1-125

Meaning of the DriverP0 parameter:

Indicates the station number (0-90). If HMITalk1.DriverP0 = 0 then the connection is point-to-point.

Meaning of the DriverP1 parameter:

54

Meaning of the DriverP2 parameter:

Start address.

Meaning of the DriverP3 parameter:

0

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

Write Ladder Memory in Binary Mode

Description of this command:

Writes the ladder memory values in binary mode.

Methods used to run this command:

Analog Output

Number of points accepted by this command:

1-125

Meaning of the DriverP0 parameter:

Indicates the station number (0-90). If HMITalk1.DriverP0 = 0 then the connection is point-to-point.

Meaning of the DriverP1 parameter:

55

Meaning of the DriverP2 parameter:

Start address.

Meaning of the DriverP3 parameter:

0

Write Communication Errors in Binary Mode

Description of this command:

Writes the communication errors values in binary mode.

Methods used to run this command:

Analog Output

Number of points accepted by this command:

1-125

Meaning of the DriverP0 parameter:

Indicates the station number (0-90). If HMITalk1.DriverP0 = 0 then the connection is point-to-point.

Meaning of the DriverP1 parameter:

57

Meaning of the DriverP2 parameter:

Start address.

Meaning of the DriverP3 parameter:

0

Write Input/Output, Internal Relays and Shift Register Bits in Bit Mode

Description of this command:

Writes the input/output, internal relays and shift register bits values in bit mode.

Methods used to run this command:

Digital Output

Number of points accepted by this command:

1-8

Meaning of the DriverP0 parameter:

Indicates the station number (0-90). If HMITalk1.DriverP0 = 0 then the connection is point-to-point.

Meaning of the DriverP1 parameter:

51

Meaning of the DriverP2 parameter:

Start address. HMITalk1.DriverP2 must have the 8 bit- "package number" accessed, where:

Meaning of the DriverP2 parameter:

$(n/8)+1$, where "n" is the I/O bit number (decimal) which heads each PLC group of 8 bits. For example: for the group of I/O bits from 136 to 143 (dec.):

Meaning of the DriverP2 parameter:

$(136/8)+1=18$

Meaning of the DriverP3 parameter:

0

Read Timer/Counter/Data Registers in BCD Mode

Description of this command:

Reads the timer/counter/data registers values in BCD mode.

Methods used to run this command:

Analog Input

Number of points accepted by this command:

1-128

CPKSoft Engineering

Industrial communication drivers.

www.cpksoft.com

www.facebook.com/cpksoftengineering

cpksoftengineering@hotmail.com

cpksoftengineering@hotmail.com

phone: 54-911-45788354

1990-2012

Industrial communication solutions for Windows

Meaning of the DriverP0 parameter:

Indicates the station number (0-90). If HMITalk1.DriverP0 = 0 then the connection is point-to-point.

Meaning of the DriverP1 parameter:

49

Meaning of the DriverP2 parameter:

Start address. In this case, HMITalk1.DriverP2 must have a value from 1 to 64 (dec.) to access PLC records 600 to 677 (octal), and a value from 65 to 128 (dec.) to access PLC records 400 to 577 (octal).

Meaning of the DriverP3 parameter:

1

Read Input/Output, Internal Relays and Shift Register Bits in Words and BCD Mode

Description of this command:

Reads the input/output, internal relays and shift register bits values in word and BCD mode.

Methods used to run this command:

Analog Input

Number of points accepted by this command:

1-250

Meaning of the DriverP0 parameter:

Indicates the station number (0-90). If HMITalk1.DriverP0 = 0 then the connection is point-to-point.

Meaning of the DriverP1 parameter:

51

Meaning of the DriverP2 parameter:

Start address. HMITalk1.DriverP2 must have the 8 bit- "package number" accessed, where:

Meaning of the DriverP2 parameter:

$(n/8)+1$, where "n" is the I/O bit number (decimal) which heads each PLC group of 8 bits. For example: for the group of I/O bits from 136 to 143 (dec.):

Meaning of the DriverP2 parameter:

$(136/8)+1=18$

Meaning of the DriverP3 parameter:

1

Read Scratch Pad Memory in BCD Mode

Description of this command:

Reads the scratch pad memory values in BCD mode.

Methods used to run this command:

Analog Input

Number of points accepted by this command:

1-128

Meaning of the DriverP0 parameter:

Indicates the station number (0-90). If HMITalk1.DriverP0 = 0 then the connection is point-to-point.

Meaning of the DriverP1 parameter:

54

Meaning of the DriverP2 parameter:

Start address.

Meaning of the DriverP3 parameter:

1

Read Ladder Memory in BCD Mode

Description of this command:

Reads the ladder memory values in BCD mode.

Methods used to run this command:

Analog Input

Number of points accepted by this command:

1-128

Meaning of the DriverP0 parameter:

Indicates the station number (0-90). If HMITalk1.DriverP0 = 0 then the connection is point-to-point.

Meaning of the DriverP1 parameter:

55

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

Meaning of the DriverP2 parameter:

Start address.

Meaning of the DriverP3 parameter:

1

Read Communication Errors in BCD Mode

Description of this command:

Reads the communication errors values in BCD mode.

Methods used to run this command:

Analog Input

Number of points accepted by this command:

1-128

Meaning of the DriverP0 parameter:

Indicates the station number (0-90). If HMITalk1.DriverP0 = 0 then the connection is point-to-point.

Meaning of the DriverP1 parameter:

57

Meaning of the DriverP2 parameter:

Start address.

Meaning of the DriverP3 parameter:

1

Write Timer/Counter/Data Registers in BCD Mode

Description of this command:

Writes the timer/counter/data registers values in BCD mode.

Methods used to run this command:

Analog Output

Number of points accepted by this command:

1-125

Meaning of the DriverP0 parameter:

Indicates the station number (0-90). If HMITalk1.DriverP0 = 0 then the connection is point-to-point.

Meaning of the DriverP1 parameter:

49

Meaning of the DriverP2 parameter:

Start address. In this case, HMITalk1.DriverP2 must have a value from 1 to 64 (dec.) to access PLC records 600 to 677 (octal), and a value from 65 to 128 (dec.) to access PLC records 400 to 577 (octal).

Meaning of the DriverP3 parameter:

1

Write Input/Output, Internal Relays and Shift Register Bits in Words and BCD Mode

Description of this command:

Writes the input/output, internal relays and shift register bits values in word and BCD mode.

Methods used to run this command:

Analog Output

Number of points accepted by this command:

1-125

Meaning of the DriverP0 parameter:

Indicates the station number (0-90). If HMITalk1.DriverP0 = 0 then the connection is point-to-point.

Meaning of the DriverP1 parameter:

51

Meaning of the DriverP2 parameter:

Start address. HMITalk1.DriverP2 must have the 8 bit- "package number" accessed, where:

Meaning of the DriverP2 parameter:

$(n/8)+1$, where "n" is the I/O bit number (decimal) which heads each PLC group of 8 bits. For example: for the group of I/O bits from 136 to 143 (dec.):

Meaning of the DriverP2 parameter:

$(136/8)+1=18$

Meaning of the DriverP3 parameter:

1

CPKSoft Engineering

Industrial communication drivers.

www.cpksoft.com

www.facebook.com/cpksoftengineering

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

hotmail.com

phone: 54-911-45788354

1990-2012

Industrial communication solutions for Windows

Write Scratch Pad Memory in BCD Mode

Description of this command:

Writes the scratch pad memory values in BCD mode.

Methods used to run this command:

Analog Output

Number of points accepted by this command:

1-125

Meaning of the DriverP0 parameter:

Indicates the station number (0-90). If HMITalk1.DriverP0 = 0 then the connection is point-to-point.

Meaning of the DriverP1 parameter:

54

Meaning of the DriverP2 parameter:

Start address.

Meaning of the DriverP3 parameter:

1

Write Ladder Memory in BCD Mode

Description of this command:

Writes the ladder memory values in BCD mode.

Methods used to run this command:

Analog Output

Number of points accepted by this command:

1-125

Meaning of the DriverP0 parameter:

Indicates the station number (0-90). If HMITalk1.DriverP0 = 0 then the connection is point-to-point.

Meaning of the DriverP1 parameter:

55

Meaning of the DriverP2 parameter:

Start address.

Meaning of the DriverP3 parameter:

1

Write Communication Errors in BCD Mode

Description of this command:

Writes the communication errors values in BCD mode.

Methods used to run this command:

Analog Output

Number of points accepted by this command:

1-125

Meaning of the DriverP0 parameter:

Indicates the station number (0-90). If HMITalk1.DriverP0 = 0 then the connection is point-to-point.

Meaning of the DriverP1 parameter:

57

Meaning of the DriverP2 parameter:

Start address.

Meaning of the DriverP3 parameter:

1

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

Supported devices

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

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

KOYO Direct Logic DL305 Series
KOYO Direct Logic DL330 PLC
KOYO Direct Logic DL330P PLC
KOYO Direct Logic DL340 PLC

CPKSoft Engineering

Industrial communication drivers.

www.cpksoft.com

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

cpksoftengineering@
hotmail.com

phone: 54-911-45788354

1990-2012