

EtherNet/IP Command List

I EtherNet/IP Objects

Basic Commands Object (class code = 0x64)

Class Code: 64hex

Scope

The Basic Commands Object provides a set of commonly used Dynamark commands. Each command is implemented as its own object specific service.

Attributes

None

Common services

None

Object specific services

Service Code	Need in Implementation		Service Name	Description of Service
	Class	Instance		
4B _{hex}	N/A	Required	BEGINTRANS	See Dynamark Interface Protocol
4C _{hex}	N/A	Required	EXECTRANS	See Dynamark Interface Protocol
4D _{hex}	N/A	Required	GETCOUNT	See Dynamark Interface Protocol
4E _{hex}	N/A	Required	SETCOUNT	See Dynamark Interface Protocol
4F _{hex}	N/A	Required	GETCOUNTERVALUE	See Dynamark Interface Protocol
50 _{hex}	N/A	Required	SETCOUNTERVALUE	See Dynamark Interface Protocol
51 _{hex}	N/A	Required	GETPARSEDTEXT	See Dynamark Interface Protocol
52 _{hex}	N/A	Required	GETTEXT	See Dynamark Interface Protocol
53 _{hex}	N/A	Required	SETTEXT	See Dynamark Interface Protocol



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54 _{hex}	N/A	Required	GETVARLIST	See Dynamark Interface Protocol
55 _{hex}	N/A	Required	GETVARIABLES	See Dynamark Interface Protocol
56 _{hex}	N/A	Required	SETVARIABLES	See Dynamark Interface Protocol
57 _{hex}	N/A	Required	LOADPROJECT	See Dynamark Interface Protocol
58 _{hex}	N/A	Required	GETCURRENTPROJECT	See Dynamark Interface Protocol
59 _{hex}	N/A	Required	SAVEPROJECT	See Dynamark Interface Protocol
5A _{hex}	N/A	Required	GETPOSITIONOFFSET	See Dynamark Interface Protocol
5B _{hex}	N/A	Required	SETPOSITIONOFFSET	See Dynamark Interface Protocol
5C _{hex}	N/A	Required	GETENCODERDELAY	See Dynamark Interface Protocol
5D _{hex}	N/A	Required	SETENCODERDELAY	See Dynamark Interface Protocol
5E _{hex}	N/A	Required	RESETSYSTEM	See Dynamark Interface Protocol
5F _{hex}	N/A	Required	GETDATA	See Dynamark Interface Protocol
60 _{hex}	N/A	Required	SETDATA	See Dynamark Interface Protocol
61 _{hex}	N/A	Required	GETVERSION	See Dynamark Interface Protocol
63 _{hex}	N/A	Required	GENERIC	Can be used for all Dynamark commands

BEGINTRANS

BEGINTRANS Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of data
Data	SINT[]	'Length' bytes of UTF8 encoded text

EXECTRANS

EXECTRANS Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of data
Data	SINT[]	'Length' bytes of UTF8 encoded text

GETCOUNT

GETCOUNT Request Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of countername
Countername	SINT[]	'Length' bytes of UTF8 encoded text

GETCOUNT Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Value	DINT	Value of counter

SETCOUNT

SETCOUNT Request Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of countername
Countername	SINT[]	'Length' bytes of UTF8 encoded text
Value	DINT	New counter value

SETCOUNT Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of data
Data	SINT[]	'Length' bytes of UTF8 encoded text

GETCOUNTERVALUE

GETCOUNTERVALUE Request Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of countername
Countername	SINT[]	'Length' bytes of UTF8 encoded text



GETCOUNTERVALUE Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of value
Value	SINT[]	'Length' bytes of UTF8 encoded text

SETCOUNTERVALUE

SETCOUNTERVALUE Request Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of countername
Countername	SINT[]	'Length' bytes of UTF8 encoded text
LengthI	DINT	Size of value
Value	SINT[]	'LengthI' bytes of UTF8 encoded text

SETCOUNTERVALUE Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of value
Value	SINT[]	'Length' bytes of UTF8 encoded text

GETPARSEDTEXT

GETPARSEDTEXT Request Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of name
Name	SINT[]	'Length' bytes of UTF8 encoded text

GETPARSEDTEXT Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of value
Value	SINT[]	'Length' bytes of UTF8 encoded text

GETTEXT

GETTEXT Request Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of name
Name	SINT[]	'Length' bytes of UTF8 encoded text

GETTEXT Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of value
Value	SINT[]	'Length' bytes of UTF8 encoded text

SETTEXT

SETTEXT Request Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of name
Name	SINT[]	'Length' bytes of UTF8 encoded text
LengthI	DINT	Size of value
Value	SINT[]	'LengthI' bytes of UTF8 encoded text

SETTEXT Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of value
Value	SINT[]	'Length' bytes of UTF8 encoded text

GETVARLIST

GETVARLIST Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of value
Value	SINT[]	'Length' bytes of UTF8 encoded text

GETVARIABLES

GETVARIABLES Request Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of name
Name	SINT[]	'Length' bytes of UTF8 encoded text

GETVARIABLES Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of value
Value	SINT[]	'Length' bytes of UTF8 encoded text

SETVARIABLES

SETVARIABLES Request Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of name
Name	SINT[]	'Length' bytes of UTF8 encoded text
Length I	DINT	Size of value
Value	SINT[]	'Length' bytes of UTF8 encoded text

SETVARIABLES Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of value
Value	SINT[]	'Length' bytes of UTF8 encoded text

LOADPROJECT

LOADPROJECT Request Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of name
Name	SINT[]	'Length' bytes of UTF8 encoded text

LOADPROJECT Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of value
Value	SINT[]	'Length' bytes of UTF8 encoded text

GETCURRENTPROJECT

GETCURRENTPROJECT Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of name
Name	SINT[]	'Length' bytes of UTF8 encoded text

SAVEPROJECT

SAVEPROJECT Request Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of name
Name	SINT[]	'Length' bytes of UTF8 encoded text

SAVEPROJECT Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of value
Value	SINT[]	'Length' bytes of UTF8 encoded text

GETPOSITIONOFFSET

GETPOSITIONOFFSET Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
X-offset	FLOAT	Offset x-axis
Y-offset	FLOAT	Offset y-axis

SETPOSITIONOFFSET

SETPOSITIONOFFSET Request Service Data Field Parameters

Name	Data Type	Description of Service Parameter
X-offset	FLOAT	Offset x-axis
Y-offset	FLOAT	Offset y-axis

SETPOSITIONOFFSET Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of value
Value	SINT[]	'Length' bytes of UTF8 encoded text

GETENCODERDELAY

GETENCODERDELAY Request Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Global	Bool	Global delay

GETENCODERDELAY Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of value
Value	SINT[]	'Length' bytes of UTF8 encoded text

SETENCODERDELAY

SETENCODERDELAY Request Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Global	Bool	Global delay
Length	DINT	Size of value
Value	SINT[]	'Length' bytes of UTF8 encoded text

SETENCODERDELAY Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of value
Value	SINT[]	'Length' bytes of UTF8 encoded text

RESETSYSTEM

RESETSYSTEM Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of value
Value	SINT[]	'Length' bytes of UTF8 encoded text

GETDATA

GETDATA Request Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of name
Name	SINT[]	'Length' bytes of UTF8 encoded text
LengthI	DINT	Size of ID
ID	SINT[]	'LengthI' bytes of UTF8 encoded text

GETDATA Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of value
Value	SINT[]	'Length' bytes of UTF8 encoded text

SETDATA

SETDATA Request Service Data Field Parameters



Name	Data Type	Description of Service Parameter
Length	DINT	Size of name
Name	SINT[]	'Length' bytes of UTF8 encoded text
Length1	DINT	Size of ID
ID	SINT[]	'Length1' bytes of UTF8 encoded text
Length2	DINT	Size of value
Value	SINT[]	'Length2' bytes of UTF8 encoded text

SETDATA Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of value
Value	SINT[]	'Length' bytes of UTF8 encoded text

GETVERSION

GETVERSION Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of software
Software	SINT[]	'Length' bytes of UTF8 encoded text
Length1	DINT	Size of dsp
Dsp	SINT[]	'Length1' bytes of UTF8 encoded text
Length2	DINT	Size of image
Image	SINT[]	'Length2' bytes of UTF8 encoded text

GENERIC

GENERIC Request Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of cmd
Cmd	SINT[]	'Length' bytes of UTF8 encoded text
Length1	DINT	Size of Arg1
Arg1	SINT[]	'Length1' bytes of UTF8 encoded text
Length2	DINT	Size of Arg2
Arg2	SINT[]	'Length2' bytes of UTF8 encoded text
Length3	DINT	Size of Arg3
Arg3	SINT[]	'Length3' bytes of UTF8 encoded text
Length4	DINT	Size of Arg4
Arg4	SINT[]	'Length4' bytes of UTF8 encoded text



GENERIC Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of value
Value	SINT[]	'Length' bytes of UTF8 encoded text

Extended Commands Object (class code = 0x65)

Class Code: 65hex

Scope

The Extended Commands Object provides additional Dynamark commands to complement the basic set.

Each command is implemented as its own object specific service.

Attributes

None

Common services

None

Object specific services

Service Code	Need in Implementation		Service Name	Description of Service
	Class	Instance		
4B _{hex}	N/A	Required	BUFFERCLEAR	See Dynamark Interface Protocol
4C _{hex}	N/A	Required	BUFFERDATA	See Dynamark Interface Protocol
4D _{hex}	N/A	Required	BUFFERREVOKE	See Dynamark Interface Protocol
4E _{hex}	N/A	Required	GETBUFFERSTATUS	See Dynamark Interface Protocol
4F _{hex}	N/A	Required	GETCODINGFILE	See Dynamark Interface Protocol
50 _{hex}	N/A	Required	SETCODINGFILE	See Dynamark Interface Protocol
51 _{hex}	N/A	Required	GETCODINGLINE	See Dynamark Interface Protocol
52 _{hex}	N/A	Required	SETCODINGLINE	See Dynamark Interface Protocol
53 _{hex}	N/A	Required	GETMSG24	See Dynamark Interface Protocol
54 _{hex}	N/A	Required	GETMSG25	See Dynamark Interface Protocol
55 _{hex}	N/A	Required	GETSYSTEMCOUNTER	See Dynamark Interface Protocol



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56 _{hex}	N/A	Required	SETSYSTEMCOUNTER	See Dynamark Interface Protocol
57 _{hex}	N/A	Required	GETPRINTCOUNTER	See Dynamark Interface Protocol
58 _{hex}	N/A	Required	SETMAXCOUNTS	See Dynamark Interface Protocol
59 _{hex}	N/A	Required	GETCO2ONPULSEOFFSET	See Dynamark Interface Protocol
5A _{hex}	N/A	Required	GETDATE	See Dynamark Interface Protocol
5B _{hex}	N/A	Required	SETTIME	See Dynamark Interface Protocol
5C _{hex}	N/A	Required	SETDATE	See Dynamark Interface Protocol

BUFFERCLEAR

BUFFERCLEAR Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of value
Value	SINT[]	'Length' bytes of UTF8 encoded text

BUFFERDATA

BUFFERDATA Request Service Data Field Parameters

Name	Data Type	Description of Service Parameter
ID	DINT	Data ID
Length1	DINT	Size of Arg1
Arg1	SINT[]	'Length1' bytes of UTF8 encoded text
Length2	DINT	Size of Arg2
Arg2	SINT[]	'Length2' bytes of UTF8 encoded text
Length3	DINT	Size of Arg3
Arg3	SINT[]	'Length3' bytes of UTF8 encoded text
Length4	DINT	Size of Arg4
Arg4	SINT[]	'Length4' bytes of UTF8 encoded text

BUFFERREVOKE

BUFFERREVOKE Request Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of function
Function	SINT[]	'Length' bytes of UTF8 encoded text
Parameter	DINT	Function parameter

BUFFERREVOKE Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of value
Value	SINT[]	'Length' bytes of UTF8 encoded text

GETBUFFERSTATUS

GETBUFFERSTATUS Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Level	DINT	Bufferlevel

GETCODINGFILE

GETCODINGFILE Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of filename
Filename	SINT[]	'Length' bytes of UTF8 encoded text
nCodes	DINT	Number of codes in file

SETCODINGFILE

SETCODINGFILE Request Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of filename
Filename	SINT[]	'Length' bytes of UTF8 encoded text

SETCODINGFILE Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of value
Value	SINT[]	'Length' bytes of UTF8 encoded text

GETCODINGLINE

GETCODINGLINE Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Value	DINT	Active line number

SETCODINGLINE

SETCODINGLINE Request Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Value	DINT	Line number

SETCODINGLINE Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of value
Value	SINT[]	'Length' bytes of UTF8 encoded text

GETMSG24

GETMSG24 Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of msg
Msg	SINT[]	'Length' bytes of UTF8 encoded text

GETMSG25

GETMSG25 Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of msg
Msg	SINT[]	'Length' bytes of UTF8 encoded text

GETSYSTEMCOUNTER

GETSYSTEMCOUNTER Request Service Data Field Parameters



Name	Data Type	Description of Service Parameter
ID	DINT	ID of counter

GETSYSTEMCOUNTER Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
ID	DINT	ID of counter
Value	DINT	Value of counter

SETSYSTEMCOUNTER

SETSYSTEMCOUNTER Request Service Data Field Parameters

Name	Data Type	Description of Service Parameter
ID	DINT	ID of counter
Value	DINT	Value of counter

SETSYSTEMCOUNTER Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of value
Value	SINT[]	'Length' bytes of UTF8 encoded text

GETPRINTCOUNTER

GETPRINTCOUNTER Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Value	DINT	Value of print counter

SETMAXCOUNTS

SETMAXCOUNTS Request Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Value	DINT	Maximum number of prints for this message

SETMAXCOUNTS Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of value
Value	SINT[]	'Length' bytes of UTF8 encoded text

GETCO2ONPULSEOFFSET

GETCO2ONPULSEOFFSET Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Value	DINT	offset

GETDATE

GETDATE Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Hour	DINT	Hour
Minute	DINT	Minute
Second	DINT	Second
Year	DINT	Year
Month	DINT	Month
Day	DINT	Day

SETTIME

SETTIME Request Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Hour	DINT	Hour
Minute	DINT	Minute
Second	DINT	Second

SETTIME Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Length	DINT	Size of value
Value	SINT[]	'Length' bytes of UTF8 encoded text

SETDATE

SETDATE Response Service Data Field Parameters

Name	Data Type	Description of Service Parameter
Hour	DINT	Hour
Minute	DINT	Minute
Second	DINT	Second
Year	DINT	Year
Month	DINT	Month
Day	DINT	Day