



*Experience Your* **SMART FACTORY**

# Hi-LINK Mode2 Specification

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# Hi-LINK V1.0.3

1. General Information
2. Function Description



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# CHAPTER. 1

## General Information

- 1.1 Introduction
- 1.2 Data Access Module
- 1.3 Necessary File
- 1.4 System Description
- 1.5 Document History

# 1. General Information – 1) Introduction

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- Purpose

- It can be used for data acquisition of Hanwha CNC equipment from external solutions such as MES.

- Scope of support

- Among Hanwha machine tools, the following CNC controllers are supported.  
: 0i-D, 0i-F, 31i, 32i-B
  - The following CNC controllers can be used, but support is not guaranteed.  
: 18i-B

- License Policy

- One serial number is provided for the license, and only one PC can be registered.
  - For initialization of an already activated license, please contact us at the email address below. Your request may be rejected according to our service policy.  
: [cjs089@hanwha.com](mailto:cjs089@hanwha.com)
  - The following information is required for license issuance.  
: SI Company Name  
: Customer company name and number of connected facilities  
The above information is stored in the database to provide license reissuance and initialization services, and is used as customer identification information.

# 1. General Information – 2) Data Access Module

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- Permitted data by access level

- Monitoring data and remote control activation functions are classified according to the customer's ID level.

Monitoring Grade	Accessible Data
Module1	Machine Status
	Production quantity
	Error Information
	Activated Program Information
Module2	Tool Life Data
	Tool Offset Information
Module3	Motor Temperature
	Program List
	Program Detail Information
Module4	NC OP(Operating Panel) Status

Remote control Grade	Accessible Data
Module1	-
Module2	Update Tool Life
	Update Tool Offset
Module3	Create Program
	Update Program
	Delete Program
	Change Activation Program
Module4	OP Remote Control

# 1. General Information – 3) Necessary File

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- Necessary DLL List

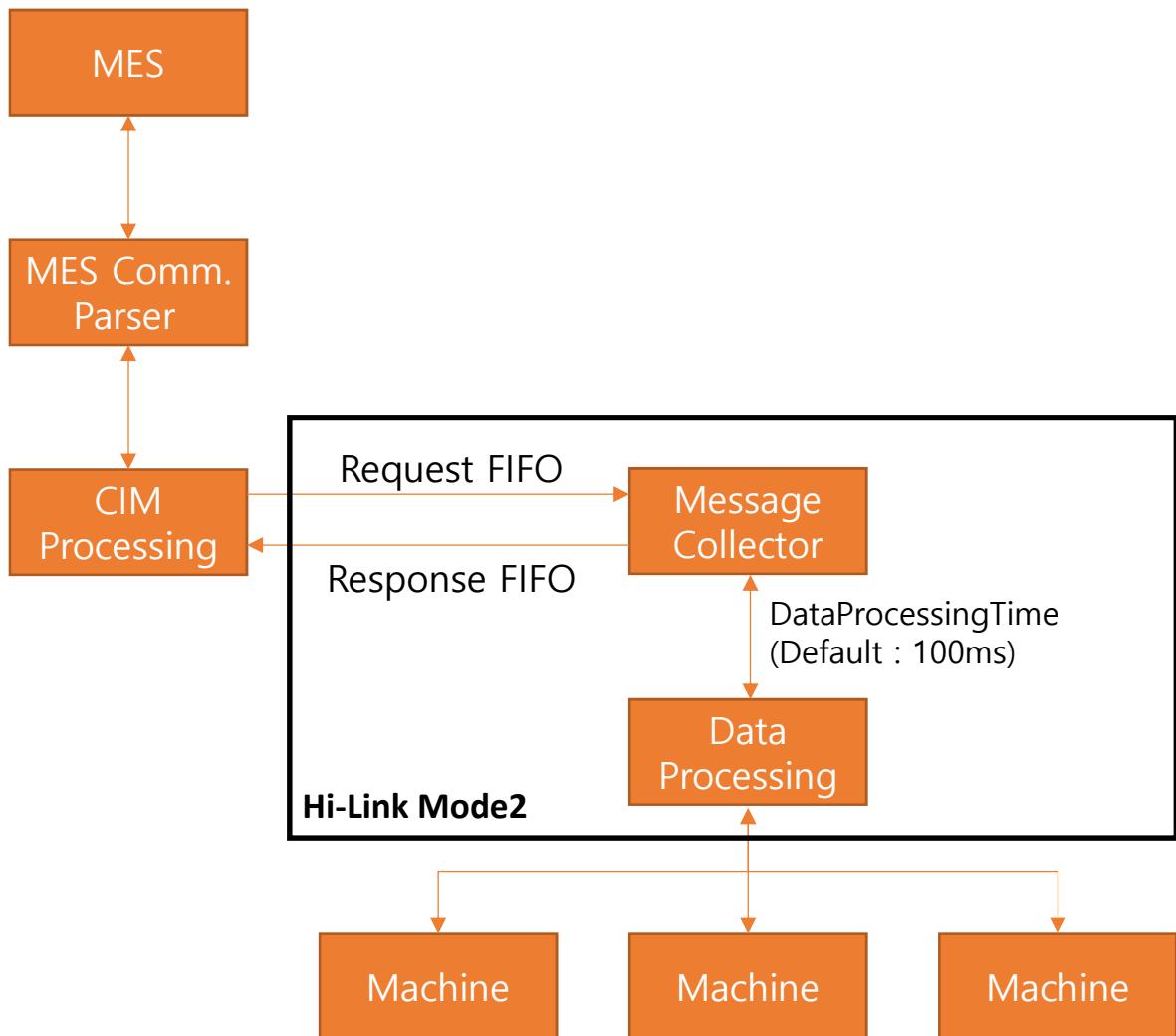
1. Necessary DLL

- Hi-Link.dll
- websocket-sharp.dll
- Hi-Link\_Advanced.dll

2. DLL Path : 64bit - C:\Windows\SysWOW64

- Fwlib32.dll
- Fwlbe1.dll

# 1. General Information – 4) System Description



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#### Static Class Name

SystemInfo

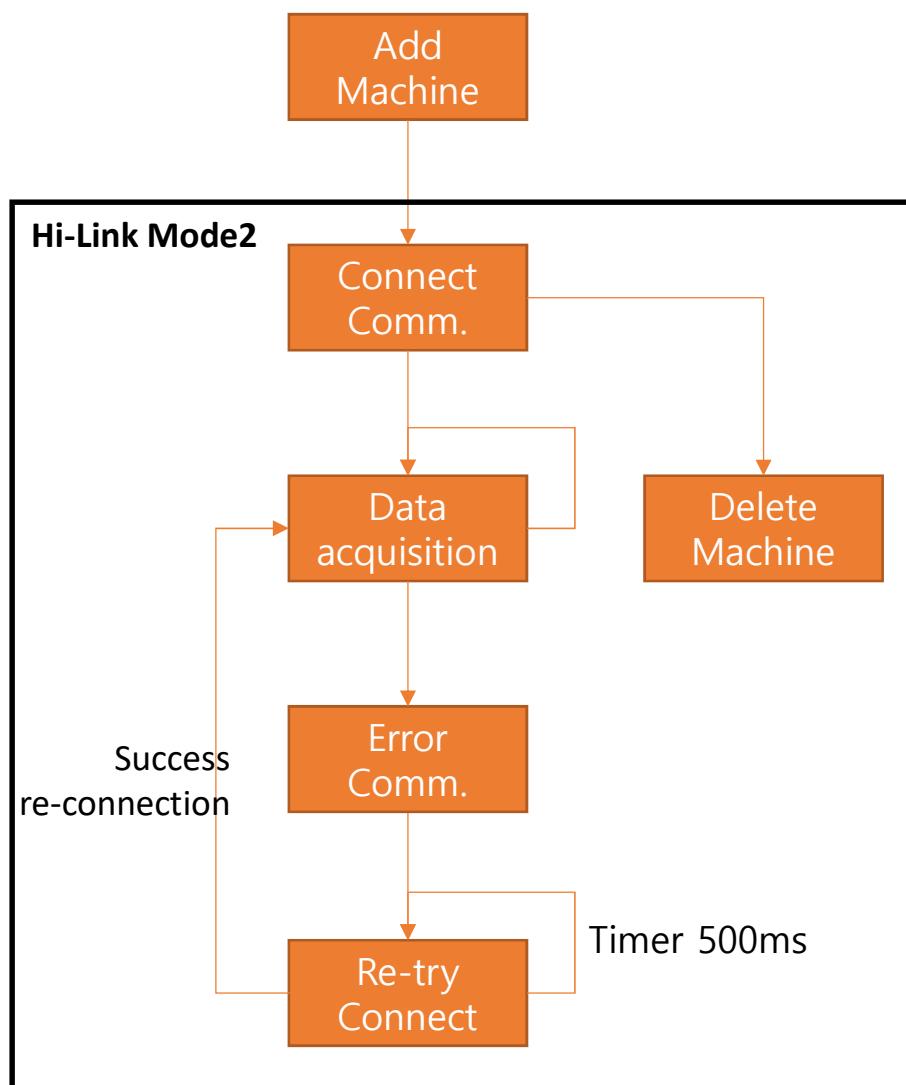
---

#### Arguments

static int	DataProcessingTime	Message Processing Cycle Time
static int	MachineStatusCycleTime	Gathering Machine Status Cycle Time
static string	SerialNumber	Hi-Link Serial key

---

# 1. General Information – 4) System Description



# 1. General Information – 5) Document History



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## CHAPTER. 2 |

# Message Description

- 2.1 Message Format
- 2.2 Message Type
- 2.3 General Error List

## 2. Message Description – 1) Message Format

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### Class Name

RequestDataMessage

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### Arguments

string	UID	Machine Unique ID
CollectDataType	DataType	Request Message Type
object	Data	Required data for command processing

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### Class Name

ResponseDataMessage

---

### Arguments

string	UID	Machine Unique ID
CollectDataType	DataType	Response Message Type
object	Data	Data response to processing requests

---

## 2. Message Description – 1) Message Format

Function	Message Type (CollectDataType)	Data Structure (Input / Output)
Connect machine	AddMachine	MachinePInfo / GetMachineStatus
Delete machine	DeleteMachine	Null / short
Update machine	UpdateMachine	MachinePInfo / GetMachineStatus
Machine list of connecting	GetMachineList	Null / GetMachineInfoList
Production Count	GetProductCount	Null / GetProductCount
Error Information	GetErrorInfo	Null / GetErrorInfo
Activated Program Info.	GetActivateProgInfo	Null / GetActivateProgInfo
Tool Life Info.	GetToolLifeInfo	Null / GetToolLifeInfo
Update value of tool life param.	UpdateToolLife	List<MachineToolLife> / short
Tool offset information	GetToolOffsetInfo	HeadType / GetToolOffsetInfo
Update value of offset param.	UpdateToolOffset	MachineToolOffsetInfo / short
Request motor temperature	GetMotorTemperature	Null / GetMotorTemperatureInfo
Request list of program info.	GetProgListInfo	HeadType / GetProgramListInfo
Request program details	GetProgDataInfo	GetProgramData / GetProgramData
Create and update program information	UpdateProgram	UpdateMachineProgramInfo / short
Delete program	DeleteProgram	DeleteMachineProgramInfo / short
Change activated program	UpdateActivateProg	UpdateMachineActivateProgNo / short
Request op button status	GetOPStatus	Null / GetOPStatus
Remote control the button	UpdateOPStatus	IOInfo / short
Active reset button	ResetButton	Null / short

## 2. Message Description – 2) Message Type

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### CollectDataType

#### AddMachine

##### Description

Register machine for data acquisition

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##### Input / Output Data Format

Input      MachineIPInfo      Machine network information

Output     GetMachineStatus

---

##### Return

- 32 Exceeded number of equipment connections – Type2
- 31 Exceeded number of equipment connections – Type1
- 24 Unknown error checking serial number. Contact your Hi-LINK representative
- 23 It is different the PC with the serial number activated and the current PC. Check the serial number for the PC or re-enable it
- 22 Could not log in to the license activation server. Please contact Hi-LINK manager.
- 21 You cannot access the online activation server or you do not have internet. Check your internet connection.
- 16 CNC communication error. Check the facility power, communication cable, IP and port number.
- 15 There is no DLL for the CNC type. Check whether the CNC type is supported.
- 0 Normal operation
- 21 You used the wrong serial number. Please enter the serial number correctly.
- 22 Serial number registered in another PC. Serial number already activated. Get a new license key.
- 88 This is an unregistered machine UID.

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### Class Name

MachineIPInfo

---

### Arguments

string	UID	Machine UID
string	IpAddress	IP Address
ushort	Port	Port Number

---

### Struct Name

MachineStatusInfo

---

### Arguments

MachineStatus	mainMachineStatus	Path1 Status
MachineStatus	subMachineStatus	Path2 Status
MachineStatusType	status	Machine Status

---

### Class Name

GetMachineStatus

---

### Arguments

short	result	Result of message processing
MachineStatusInfo	machineStatusInfo	Machine Status

## 2. Message Description – 2) Message Type

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---

### CollectDataType

#### DeleteMachine

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##### Description

Deletes the registered machine.

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##### Input / Output Data Format

Input Null

Output short

---

##### Return

- 99 Activate the license.
  - 21 This facility is not registered. Check the facility name and controller type. And contact the manager.
  - 8 Invalid communication handler number used.
  - 0 Normal operation
  - 89 This is an unregistered machine UID.
-

## 2. Message Description – 2) Message Type

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### CollectDataType

#### UpdateMachine

##### Description

Change the communication setting value of the registered equipment.

##### Input / Output Data Format

Input	MachinePIInfo
Output	GetMachineStatus

##### Return

- 99 Activate the license.
  - 21 This facility is not registered. Check the facility name and controller type. And contact the manager.
  - 8 Invalid communication handler number used.
  - 0 Normal operation
  - 89 This is an unregistered machine UID.
- 

---

### Class Name

MachinePIInfo

##### Arguments

string	UID	Machine UID
string	IpAddress	IP Address
ushort	Port	Port number

---

### Class Name

GetMachineStatus

##### Arguments

short	result	Result of message processing
MachineStatusInfo	MachineStatusInfo	Machine Status

---

### Struct Name

MachineStatusInfo

##### Arguments

MachineStatus	mainMachineStatus	Path1 Status
MachineStatus	subMachineStatus	Path2 Status
MachineStatusType	status	Machine Status

## 2. Message Description – 2) Message Type

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### CollectDataType

#### GetMachineList

##### Description

Get information of all registered machine.

##### Input / Output Data Format

Input	Null	None
Output	GetMachineInfoList	Network setting information of machine

---

##### Return

- 99 Activate the license.
  - 8 Invalid communication handler number used.
  - 7 CNC controller type is invalid.
  - 0 Normal operation
  - 89 This is an unregistered machine UID.
- 

---

### Class Name

#### GetMachineInfoList

##### Arguments

short	result	Result of message processing
List<MachineIPInfo>	MachineIPInfo	Network setting information of machine

---

---

### Class Name

#### MachineIPInfo

##### Arguments

string	UID	Machine UID
string	IpAddress	IP Address
ushort	Port	Port number

---

## 2. Message Description – 2) Message Type

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### CollectDataType

#### GetProductCount

##### Description

request the production quantity and target quantity of the equipment.

##### Input / Output Data Format

Input Null

Output GetProductCount

##### Return

- 99 Activate the license.
- 8 Invalid communication handler number used.
- 7 CNC controller type is invalid.
- 0 Normal operation
- 89 This is an unregistered machine UID.

---

### Class Name

GetProductCount

#### Arguments

short	result	Result of message processing
MachineProductInfo	machineProductInfo	production quantity

---

### Struct Name

MachineProductInfo

#### Arguments

int	currentProdCount	Current production count
int	targetProdCount	Target production count
short	unitFlag	equipment dimension unit =0 : mm =1 : inch

## 2. Message Description – 2) Message Type

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### CollectDataType

#### GetErrorInfo

##### Description

Request the current alarm information of the equipment.

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##### Input / Output Data Format

Input null

Output GetMachineStatus

---

##### Return

- 99 Activate the license.
  - 8 Invalid communication handler number used.
  - 7 CNC controller type is invalid.
  - 0 Normal operation
  - 89 This is an unregistered machine UID.
- 

---

### Class Name

#### GetErrorInfo

---

##### Arguments

short	result	Result of message processing
MachineAlarmInfo	machineAlarmInfo	List of current machine errors

---

---

### Struct Name

#### MachineAlarmInfo

---

##### Arguments

short	headType	Path Type
MachineAlarm[]	alarmArray	Machine Error List

---

---

### Struct Name

#### MachineAlarm

---

##### Arguments

string	axis	Alarm axis
int	no	Alarm number
int	type	Alarm type

---

## 2. Message Description – 2) Message Type

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### CollectDataType

#### GetActivateProgInfo

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##### Description

Request information about the activation program of the machine.

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##### Input / Output Data Format

Input	null
Output	GetActivateProgInfo

---

##### Return

- 99 Activate the license.
  - 98 Check license grade.
  - 8 Invalid communication handler number used.
  - 7 CNC controller type is invalid.
  - 0 Normal operation
  - 89 This is an unregistered machine UID.
- 

---

### Class Name

#### GetActivateProgInfo

---

##### Arguments

short	result	Result of message processing
MachineProgramInfo	machineCurrentProgInfo	Activated program information

---

---

### Struct Name

#### MachineProgramInfo

---

##### Arguments

string	mainProgramName	Path1 activated program number
string	mainProgramData	Path1 activated program data
string	mainProgramComment	Path1 activated program comment
string	subProgramName	Path2 activated program number
string	subProgramData	Path2 activated program data
string	subProgramComment	Path2 activated program comment

---

## 2. Message Description – 2) Message Type

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### CollectDataType

#### GetToolLifeInfo

##### Description

Request tool life information.

##### Input / Output Data Format

Input null

Output GetToolLifeInfo

---

##### Return

- 99 Activate the license.
- 98 Check license grade.
- 8 Invalid communication handler number used.
- 7 CNC controller type is invalid.
- 0 Normal operation
- 89 This is an unregistered machine UID.

---

### Class Name

GetToolLifeInfo

---

#### Arguments

short	result	Result of message processing
List<MachineToolLife>	machineToolLife	Information of tool life

---

### Struct Name

MachineToolLifeInfo

---

#### Arguments

int	length;	Length
MachineToolLife[]	toolLife	Tool Life List

---

### Struct Name

MachineToolLife

---

#### Arguments

Short	toolNum	Tool number
Int	useCount	Used count
Int	configCount	Target setting count of tool life
Int	warningCount	Warning setting count of tool life
bool	use	Whether tool life management is enabled

## 2. Message Description – 2) Message Type

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---

### CollectDataType

#### UpdateToolLife

##### Description

Request update of the tool life settings.

##### Input / Output Data Format

Input List<MachineToolLife>

Output short

---

##### Return

- 99 Activate the license.
  - 98 Check license grade.
  - 8 Invalid communication handler number used.
  - 7 CNC controller type is invalid.
  - 0 Normal operation
  - 89 This is an unregistered machine UID.
- 

---

### Struct Name

MachineToolLife

---

##### Arguments

short	toolNum	Tool number
int	useCount	Used count
Int	configCount	Target setting count of tool life
int	warningCount	Warning setting count of tool life
bool	use	Whether tool life management is enabled

---

## 2. Message Description – 2) Message Type

### CollectDataType

#### GetToolOffsetInfo

##### Description

Request the offset setting value of the machine.

##### Input / Output Data Format

Input	HeadType
Output	GetToolOffsetInfo

##### Return

- 99 Activate the license.
- 98 Check license grade.
- 8 Invalid communication handler number used.
- 7 CNC controller type is invalid.
- 0 Normal operation
- 89 This is an unregistered machine UID.

### Class Name

#### GetToolOffsetInfo

##### Arguments

short	result	Result of message processing
MachineToolOffsetInfo	machineToolOffsetInfo	Offset information by tool

### Struct Name

#### MachineToolOffsetInfo

##### Arguments

short	headType	Path Type
int	length	length
int[]	toopTipOffsetArray	Tip offset List
ToolOffsetData[]	toolGeoOffsetArray	Geometry offset List
ToolOffsetData[]	toolWearOffsetArray	Wear offset List

### Struct Name

#### ToolOffsetData

##### Arguments

Int	no	Offset Number
Int	r	R * 1000
int	x	X * 1000
Int	y	Y * 1000
Int	z	Z * 1000

## 2. Message Description – 2) Message Type

---

### CollectDataType

#### UpdateToolOffset

##### Description

Update the offset setting value of the machine.

##### Input / Output Data Format

Input      UpdateMachineToolOffsetInfo

Output     short

##### Return

- 99   Activate the license.
- 98   Check license grade.
- 8    Invalid communication handler number used.
- 7    CNC controller type is invalid.
- 0    Normal operation
- 89   This is an unregistered machine UID.

---

##### Struct Name

MachineToolOffsetInfo

##### Arguments

short	headType	Path Type
int	length	length
int[]	toopTipOffsetArray	Tip offset List
ToolOffsetData[]	toolGeoOffsetArray	Geometry offset List
ToolOffsetData[]	toolWearOffsetArray	Wear offset List

---

##### Struct Name

ToolOffsetData

##### Arguments

Int	no	Offset Number
Int	r	R * 1000
int	x	X * 1000
Int	y	Y * 1000
Int	z	Z * 1000

## 2. Message Description – 2) Message Type

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---

### CollectDataType

#### GetMotorTemperature

##### Description

Request current motor temperature data for the facility.

##### Input / Output Data Format

Input Null

Output GetMotorTemperatureInfo

---

##### Return

- 99 Activate the license.
- 98 Check license grade.
- 8 Invalid communication handler number used.
- 7 CNC controller type is invalid.
- 0 Normal operation
- 89 This is an unregistered machine UID.

---

### Class Name

GetMotorTemperatureInfo

---

#### Arguments

short	result	Result of message processing
MachineMotorTemperatureInfo	machineMotorTemperature	Motor temperature Data

---

### Struct Name

MachineMotorTemperatureInfo

---

#### Arguments

MotorTemperature[]	mainMotorArray	Path1 motor temperature
MotorTemperature[]	subMotorArray	Path2 motor temperature
MotorTemperature[]	spindleMotorArray	Spindle motor temperature

---

### Struct Name

MotorTemperature

---

#### Arguments

string	name	Motor axis name
string	temperature	Temperature value

## 2. Message Description – 2) Message Type

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### CollectDataType

#### GetProgListInfo

##### Description

Request the list of programs by system of the machine.

##### Input / Output Data Format

Input	HeadType
Output	GetProgramListInfo

##### Return

- 99 Activate the license.
- 98 Check license grade.
- 8 Invalid communication handler number used.
- 7 CNC controller type is invalid.
- 0 Normal operation
- 89 This is an unregistered machine UID.

---

### Class Name

#### GetProgramListInfo

##### Arguments

short	result	Result of message processing
MachineProgramListInfo	machineProgramListInfo	Program list

---

### Struct Name

#### MachineProgramListInfo

##### Arguments

short	headType	Path Type
int	length	List Count
MachineProgramInfo[]	programArray	Program List

---

### Struct Name

#### MachineProgramInfo

##### Arguments

string	comment	Comment
double	programData	Program Data
double	lastModDate	Last edit date
short	no	Prog. Number
bool	opened	Activate prog.
bool	isNew	New Check

## 2. Message Description – 2) Message Type

---

---

### CollectDataType

#### GetProgDataInfo

##### Description

Request program details.

##### Input / Output Data Format

Input      GetProgramData

Output     GetProgramData

---

##### Return

- 99   Activate the license.
  - 98   Check license grade.
  - 8    Invalid communication handler number used.
  - 7    CNC controller type is invalid.
  - 0     Normal operation
  - 89    This is an unregistered machine UID.
- 

---

### Class Name

GetProgramData

---

#### Arguments

short	result	Result of message processing
MachineProgramData	machineProgramData	Program Detail Information

---

---

### Struct Name

MachineProgramData

---

#### Arguments

short	headNo	계통 정보 (Request / Response)
short	programNo	프로그램 번호 (Request / Response)
string	programData	프로그램 데이터 (Response)

---

## 2. Message Description – 2) Message Type

---

---

### CollectDataType

#### UpdateProgram

##### Description

Request to create or modify a program.

##### Input / Output Data Format

Input      UpdateMachineProgramInfo

Output     short

---

##### Return

- 99   Activate the license.
  - 98   Check license grade.
  - 8    Invalid communication handler number used.
  - 7    CNC controller type is invalid.
  - 0    Normal operation
  - 89   This is an unregistered machine UID.
- 

---

### Struct Name

UpdateMachineProgramInfo

---

##### Arguments

short	headType	Path Type
short	programNo	Program Number
string	programData	Program Datea
bool	isNew	Whether to create a program

---

## 2. Message Description – 2) Message Type

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---

### CollectDataType

#### DeleteProgram

##### Description

Request to delete the program.

---

##### Input / Output Data Format

Input DeleteMachineProgramInfo

Output short

---

##### Return

- 99 Activate the license.
- 98 Check license grade.
- 8 Invalid communication handler number used.
- 7 CNC controller type is invalid.
- 0 Normal operation
- 89 This is an unregistered machine UID.

---

### Class Name

DeleteMachineProgramInfo

---

##### Arguments

short

headType

Path Type

short

programNo

Program Number

## 2. Message Description – 2) Message Type

---

---

### CollectDataType

#### UpdateActivateProg

---

##### Description

Activate the selected program.

---

##### Input / Output Data Format

Input      UpdateMachineActivateProgNo

Output     short

---

##### Return

- 99   Activate the license.
  - 98   Check license grade.
  - 8    Invalid communication handler number used.
  - 7    CNC controller type is invalid.
  - 0    Normal operation
  - 89   This is an unregistered machine UID.
- 

---

### Struct Name

UpdateMachineActivateProgNo

---

### Arguments

short

headType

Path Type

short

programNo

Program Number

---

## 2. Message Description – 2) Message Type

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### CollectDataType

#### GetOPStatus

##### Description

Requests the OP (Operating Panel) button status of the machine.

##### Input / Output Data Format

Input	Null
Output	GetOPStatus

##### Return

- 99 Activate the license.
- 98 Check license grade.
- 8 Invalid communication handler number used.
- 7 CNC controller type is invalid.
- 0 Normal operation
- 89 This is an unregistered machine UID.

---

### Class Name

#### GetOPStatus

##### Arguments

short	result	Result of message processing
List<IOInfo>	ioInfo	Status list of OP button

---

### Class Name

#### IOInfo

##### Arguments

string	IOName	Button Name
short	IOUID	Button UID
short	Status	Button Status

## 2. Message Description – 2) Message Type

---

---

### CollectDataType

#### UpdateOPStatus

##### Description

Request to update the OP (Operating Panel) button status of the machine.

##### Input / Output Data Format

Input IOInfo

Output short

---

##### Return

- 99 Activate the license.
  - 98 Check license grade.
  - 8 Invalid communication handler number used.
  - 7 CNC controller type is invalid.
  - 0 Normal operation
  - 89 This is an unregistered machine UID.
- 

---

### Class Name

IOInfo

---

### Arguments

string	IOName	Button Name
short	IOUID	Button UID
short	Status	Set button status

---

## 2. Message Description – 2) Message Type

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---

### CollectDataType

#### ResetButton

---

##### Description

Activate the reset button of the machine.

---

##### Input / Output Data Format

Input Null

Output short

---

##### Return

- 99 Activate the license.
  - 98 Check license grade.
  - 8 Invalid communication handler number used.
  - 7 CNC controller type is invalid.
  - 0 Normal operation
  - 89 This is an unregistered machine UID.
-

## 2. Message Description – 3) General Error List

Return	Meaning	Explanation and Error handling
EW_PROTOCOL (-17)	Protocol error (Ethernet version only)	Data from Ethernet Board is incorrect. Contact with the service section or the section in charge.
EW_SOCKET (-16)	Socket error (Ethernet version only)	Investigate CNC power supply, Ethernet cable and I/F board.
EW_NODLL (-15)	DLL file error	There is no DLL file for each CNC series corresponding to specified node.
EW_BUS (-11)	Bus error (HSSB version only)	A bus error of CNC system occurred. Contact with the service section or the section in charge.
EW_SYSTEM2 (-10)	System error (2) (HSSB version only)	A system error of CNC system occurred. Contact with the service section or the section in charge.
EW_HSSB (-9)	Communication error of HSSB (HSSB version only)	Investigate the serial line or I/F board of HSSB.
EW_HANDLE (-8)	Handle number error	Get the library handle number.
EW_VERSION (-7)	Version mismatch between the CNC/PMC and library	The CNC/PMC version does not match that of the library. Replace the library or the CNC/PMC control software.
EW_UNEXP (-6)	Abnormal library state	An unanticipated error occurred. Contact with the section in charge.
EW_SYSTEM (-5)	System error (HSSB version only)	A system error of CNC occurred. Contact with the service section or the section in charge.
EW_PARITY (-4)	Shared RAM parity error (HSSB version only)	A hardware error occurred. Contact with the service section.
EW_MMCSYS (-3)	FANUC drivers installation error (HSSB version only)	The drivers required for execution are not installed.
EW_RESET (-2)	Reset or stop request	The RESET or STOP button was pressed. Call the termination function.
EW_BUSY (-1)	Busy	Wait until the completion of CNC processing, or retry.
EW_OK (0)	Normal termination	
EW_FUNC (1)	Error(function is not executed, or not available)	Specific function which must be executed beforehand has not been executed. Otherwise that function is not available.
FW_LFNGTH (2)	Error(data block length error, error of number of data)	Check and correct the data block length or number of data.
EW_NUMBER (3)	Error(data number error)	Check and correct the data number.
EW_ATTRIB (4)	Error(data attribute error)	Check and correct the data attribute.
EW_DATA (5)	Error(data error)	Check and correct the data. For the following operations, this code indicates that the specified program cannot be found. <ul style="list-style-type: none"> <li>• Delete specified program</li> <li>• Search specified program</li> <li>• Start uploading NC program</li> </ul>
EW_NOOPT (6)	Error(no option)	There is no corresponding CNC option.
EW_PROT (7)	Error(write protection)	Write operation is prohibited.
EW_OVRFLOW (8)	Error(memory overflow)	CNC tape memory is overflowed.
EW_PARAM (9)	Error(CNC parameter error)	CNC parameter is set incorrectly.
EW_BUFFER (10)	Error(buffer empty/full)	The buffer is empty or full. Wait until completion of CNC processing, or retry.
EW_PATH (11)	Error(path number error)	A path number is incorrect.
EW_MODE (12)	Error(CNC mode error)	The CNC mode is incorrect. Correct the CNC mode.
EW_REJECT (13)	Error(CNC execution rejection)	The execution at the CNC is rejected. Check the condition of execution.
EW_DTSRVR (14)	Error(Data server error)	Some errors occur at the data server.
EW_ALARM (15)	Error(alarm)	The function cannot be executed due to an alarm in CNC. Remove the cause of alarm.
EW_STOP (16)	Error(stop)	CNC status is stop or emergency.
EW_PASWD (17)	Error(State of data protection)	Data is protected by the CNC data protection function.



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## CHAPTER. 3 | Trouble Shooting

- 1) Error No.22 : License
- 2) Error No.100 : Redistribute Package

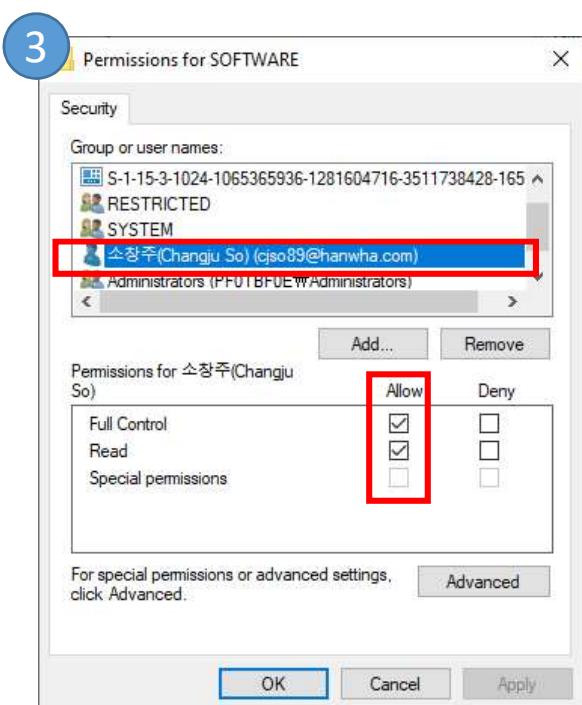
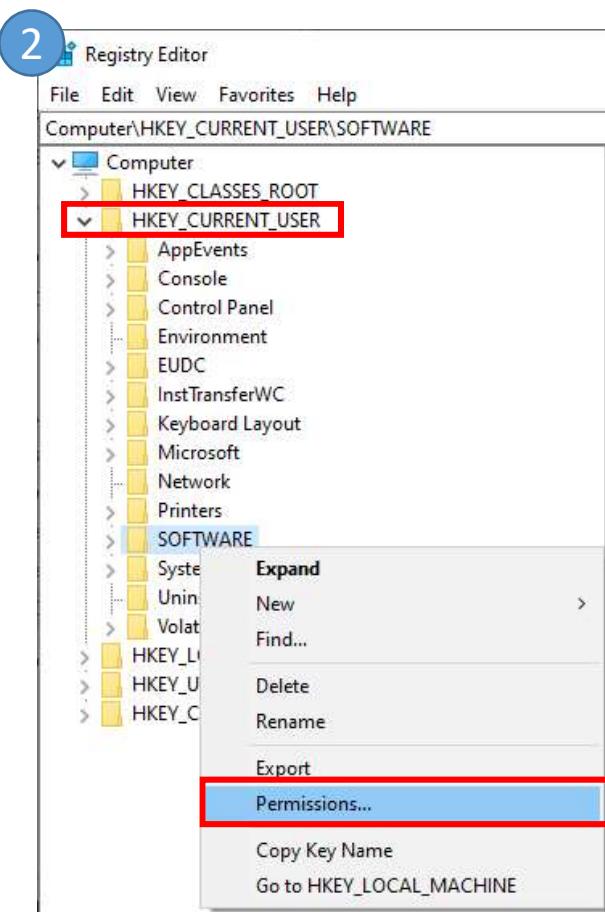
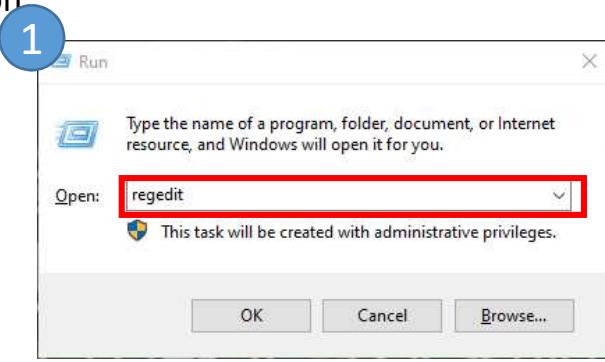
### 3. Trouble Shooting – 1) Error No.22 : License

#### ● Error Situation

- After serial number authentication, error 22 occurs when re-executing the program and opening communication

#### ● Trouble Shooting

- 1) Window Key + R
- 2) Key-in 'Regedit'
- 3) HKEY\_CURRENT\_USER
  - > SOFTWARE
  - > Mouse Right click
  - > Permissions
- 4) Select the user
- 5) Check the allow box



### **3. Trouble Shooting – 2) Error No.-100 : Redistribute Package**

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- Error Situation

- Error -100 occurs when communication is open

- Trouble shooting

- 1) First, check the IP and Router

- 2) If the error still occurs, copy and paste the .dll in the ‘Error -100’

- folder included in the package to the address below.

- : Windows 32bit – C:\Windows\System

- : Windows 64bit – C:\Windows\SysWOW64