

PANEL & PLC ERROR CODE TABLES



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Introduction

The **C-more**® Micro panels are capable of communicating over RS232, RS422 and RS485 serial networks. They communicate with Productivity Series PAC's, Do-more / BRX PLC's, CLICK PLC's, all controllers in the **Direct** LOGIC family of PLCs utilizing various protocols, and certain 3rd party PLCs. For a complete list of the supported PLCs and protocols, see the PLC Drivers table in **Chapter 6: PLC Communications**.

As with any network communications, errors may occur. To simplify identification of the possible cause of the error, we have provided tables listing these errors. If a **C-more** Micro panel communications error, or other related data exchange error does occur, the error message will appear across the top of the display screen as shown in the example below. A complete table of the panel generated errors, with their respective error codes, error messages, and the possible causes of the error follows.

The **C-more** Micro panel also monitors any errors that are generated by the PLC that is connected to it. If any of the PLC generated errors are detected, they are displayed across the top of the panel's display embedded as a hexadecimal value in error code P499. An explanation of how the specific PLC error is identified in the panel error code P499 is shown preceeding the specific manufacturer's PLC error tables. How the hexadecimal error code value is interpreted is slightly different between manufacturers, so it is important to check the explanation at the beginning of each manufacturer's tables. Since these errors are generated by the PLC, refer to the PLC manufacturers documentation for further explanation.

If you have difficulty determining the cause of the error, please refer to **Chapter 8: Troubleshooting** for some troubleshooting tips or contact our technical support group at 770-844-4200.

C-more Micro Panel Error Example



C-more Micro Panel Error Code Table

The following table includes all of the error codes and error messages that the panel will display if the listed cause is detected. All of these errors involve problems that could result with the panel communicating with the connected PLC. Be aware that not all of the panel errors are used with each type of PLC that can be connected to the panel.

| C-more Micro Panel Error Table | | |
|--------------------------------|-------------------------|---|
| Error Code | Error Message | Cause |
| P001 | PLC Com Time Out | A timeout occurred after sending a request to the PLC. |
| P002 | NAK Received | A negative acknowledgement (NAK) control code has been generated during a read/write request. |
| P003 | EOT Received | An end of transmission has been sent by PLC in response to a read/write/setbit request. |
| P004 | STX is Not Found | A Start of Text (STX) control code was not found in the data packet received from the PLC. |
| P005 | ETX/ETB NotFound | Neither an End of Text (ETX) nor an End of Transmission Block (ETB) control code was found in the data packet received from the PLC. |
| P006 | LRC Not Match | There was an incorrect Longitudinal Redundancy Check (LRC) control code in the communications packet received from the PLC. This is an indication that the data in the packet is corrupted. |
| P007 | CRC Not Match | There was an incorrect Cyclic Redundancy Check (CRC) control code in the communications packet received from the PLC. This is an indication that the data in the packet is corrupted. |
| P008 | Address NotMatch | The address value returned in the data packet from the PLC is incorrect. |
| P009 | Re.INV.FUN.Code | The function code returned in the data packet from the PLC is incorrect. |
| P010 | DataSizeNotMatch | There are an incorrect number of bytes found in the data packet returned from the PLC. |
| P011 | INV.Val.FUN.Code | There is an invalid value in the function code. |
| P012 | INVALID COMMAND | There was an invalid command sent to the PLC that wasn't recognized by the PLC. |
| P013 | ENQ Received | If the data packet does not include a negative acknowledgement (NAK - 0x15 value) in the defined packet field, then an enquiry (ENQ) control code error will be displayed. |
| P014 | TransID NotMatch | This error will be displayed if after checking the Transaction ID Byte in the data packet, there is no match to what was requested. |
| P015 | Device Not Found | A PLC device designated as Device could not be found. |
| P016 | DataByte Com.Err | The data part of the packet received contains 0 bytes of data. |
| P017 | Out of Add.Range | The touch panel requested a file number larger than 255. |
| P019 | Parity Error | Parity error occurred. |
| P020 | Can'tOpenS.Port | Can't open serial port |
| P021 | PLC# Not Match | PLC Number does not match |
| P022 | Can't Reset DCB | Unable to reset the Data Communications Bit |
| P023 | Not Connected | Cable not connected properly |
| P024 | No Other Dev. | Cannot detect other devices |
| P025 | PollingListErr | Panel not in polling list |
| P026 | PLC Connection Time Out | PLC Connection Time Out |
| P027 | Memory Error | Memory Type Incorrect |
| P028 | No Response | PLC failed to Respond: %PLC Node#%?? |

C-more Micro Panel Error Code Table continues on the next page.

C-more Micro Panel Error Code Table (cont'd)

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| C-more Micro Panel Error Table (cont'd) | | |
|---|---|---|
| Error Code | Error Message | Cause |
| P499* | ErrCode Received -> Recv .Err Code XXXX | A PLC generated error code with a hexadecimal value of XXXX has been returned from the PLC. * See the explanation for error code P499 proceeding each set of PLC error code tables. |
| P500 | Can'tWriteS.Port | Data cannot be written to the Serial port. Data was sent to the PLC via the Serial Port. If this error shows on the Panel, it indicates a Hardware Problem. |
| P700 | RD.Buff.MEM Full | There was an error while allocating memory for the read buffer. When this error is displayed, a memory leak may have occurred. |
| P701 | INV.PLC Address | Request to inaccessible memory from the HMI layer to the PLC protocol layer. This error is an indication that there is a problem in the HMI layer. |
| P702 | INV.FUN.Code | A Read/Write/SetBit request has been sent to an invalid memory area. This error is an indication that there is a problem in the HMI layer. |
| P703 | WRT.PLC.ReadOnly | A PLC Write request was made to the PLC's Read-Only memory area. This error is an indication that there is a problem in the HMI layer or the PLC protocol layer. |

Modbus Protocols Error Code P499 Explanation

The following table lists the errors that can be generated by the Modbus protocols:

AutomationDirect CLICK

AutomationDirect DirectLOGIC - Modbus (Koyo)

Modicon Modbus RTU

Entivity Modbus RTU



NOTE: The following errors can be generated from the designated PLC, are monitored by the **C-more** Micro panel, and displayed on the panel's screen as a hexadecimal value in panel error code P499, if active.

| PLC Error Codes Modbus Protocols | | |
|------------------------------------|-------------------------|--|
| Panel Error Code P499 Hex Value | Name | Meaning |
| 0x0001 | ILLEGAL FUNCTION | The function code received in the query is not an allowable action for the server (or slave). This may be because the function code is only applicable to newer devices and was not implemented in the unit selected. It could also indicate that the server (or slave) is in the wrong state to process a request of this type, for example because it is unconfigured and is being asked to return registered values. |
| 0x0002 | ILLEGAL DATA ADDRESS | The data address received in the query is not an allowable address for the server (or slave). More specifically, the combination of reference number and transfer length is invalid. For a controller with 100 registers, the PDU addresses the first register as 0, and the last one as 99. If a request is submitted with a starting register address of 96 and a quantity of registers of 4, then the request will successfully operate (address-wise at least) on registers 96, 97, 98, 99. If a request is submitted with a starting register of 96 and a quantity of registers of 5, then the request will fail with Exception code 0x02 "Illegal Data Address" since it attempts to operate on registers 96, 97, 98, 99 and 100, and there is no register with address 100. |
| 0x0003 | ILLEGAL DATA VALUE | A value contained in the query data field is not an allowable value for server (or slave). This indicates a fault in the structure of the remainder of a complex request, such as that the implied length is incorrect. It specifically does NOT mean that a data item submitted for storage in a register has a value outside the expectation of the application program, since the Modbus protocol is unaware of the significance of any particular value of any particular register. |
| 0x0004 | SLAVE DEVICE FAILURE | An unrecoverable error occurred while the server (or slave) was attempting to perform the requested action. |

Productivity Error Code P499 Explanation



NOTE: The following errors can be generated from the designated PLC, are monitored by the **C-more** Micro panel and displayed on the touch panel's screen as a hexadecimal value in panel error code PLC-499 message, if active. Please refer to the PLC manufacturer's documentation for additional information.

| PLC Error Codes for Productivity | |
|------------------------------------|--|
| Panel Error Code P499 Hex Value | Meaning |
| 0x0001 | The function code received in the query is not an allowable action for the server (or slave). This may be because the function code is only applicable to newer devices and was not implemented in the unit selected. It could also indicate that the server (or slave) is in the wrong state to process a request of this type, for example because it is unconfigured and is being asked to return registered values. |
| 0x0002 | Address out of range. Check to make sure that the C-more Micro tag and System ID match the Productivity Programming Software Tag Name and System ID. The project file in the Productivity system and the imported CSV into C-more Micro must be in sync with each other. |
| 0x0003 | A value contained in the query data field is not an allowable value for the server (or slave). This indicates a fault in the structure of the remainder of a complex request, such as that the implied length is incorrect. It specifically does NOT mean that a data item submitted for storage in a register has a value outside the expectation of the application program, since the Modbus protocol is unaware of the significance of any particular value of any particular register. |
| 0x0004 | An unrecoverable error occurred while the server (or slave) was attempting to perform the requested action. |

Do-more / BRX Error Code P499 Explanation

NOTE: The following errors can be generated from the designated PLC, are monitored by the **C-more** Micro panel, and displayed on the panel's screen as a hexadecimal value in panel error code P499, if active.

| PLC Errors for Do-more / BRX | | |
|------------------------------|------------------------------------|--|
| Error Code | Description | Resolution |
| 0x01 | Unknown Command | Occurs when a message has been corrupted or protocol version is mismatched. Check versions and update appropriately. If versions are correct, check cabling, routing and switches for bad packets. |
| 0x02 | Out of Sessions | Too many devices connected to the CPU. Reduce the number of devices connected. |
| 0x03 | Illegal Operation | Occurs when permission level is not sufficient for the operation performed by the panel. Increase the permission level to correct the problem. |
| 0x04 | Invalid Session | Session number does match for sending device. Re-establish connection by power cycling or sending updated project. |
| 0x05 | Out of Range | Invalid address exists. Ensure that address range is expanded and load configuration to the CPU. |
| 0x06 | Invalid Argument | Occurs when message cannot be parsed correctly. Could occur from noise or faulty wiring. |
| 0x07 | Program Update Active | Wait until program update is complete. |
| 0x08 | No Token | Occurs when client attempts to update the project without first acquiring the program update token. |
| 0x09 | Program Update Inhibited | Occurs when client attempts to update the project while ST21 is true. This allows the customer to use the program to prevent the project from being updated. |
| 0x0A | System Configuration Update Active | Wait until System Configuration update is complete to continue communications. |
| 0x0B | Invalid Mode | Ensure that the switch on the CPU is in Term mode. |
| 0x0C | Mode Change Active | Occurs when a PLC mode change is attempted while a mode change is in progress. In some cases it takes several scans for a mode change. |
| 0x0D | Mode Locked | Occurs when mode change is attempted and keyswitch is not in Term. |
| 0x0E | Invalid Password | Enter Do-more password in Password field of C-more Micro Panel Manager for this device. |
| 0x0F | Resource Locked | Occurs when trying to update a tag that is forced. Force must be removed in order to update the tag. |
| 0x010 | Doc Update Active | Occurs when someone attempts to access the documentation file while it is being written back to ROM. |
| 0x011 | Invalid Driver | Occurs when attempting to read driver data from a driver that doesn't exist. |
| 0x012 | Invalid Driver Data | Occurs when attempting to read a driver data type that isn't valid. |
| 0x013 | Shared RAM write failed | Occurs when attempting to read or write to a module's shared RAM and it fails. Usually occurs when the module has gone bad. |

DirectLOGIC Error Code P499 Explanation

The P499 error code is used to show any errors that are generated by the connected PLC. The P499 error message includes a four digit hexadecimal value displayed at the end of the message. This value can be found in the specific PLC's error tables to determine the cause of the error. The possible PLC generated error codes for the various **DirectLOGIC** communication protocols breakdown into a four digit hexadecimal value.

DirectLOGIC PLC Error Code Displayed Example:



DirectLOGIC – K-Sequence PLC Error Code Table

The following table lists the errors that can be generated by the **DirectLOGIC** PLC when using the K-Sequence protocol.



NOTE: The following errors can be generated from the designated PLC, are monitored by the **C-more** Micro panel and displayed on the touch panel's screen as a hexadecimal value in panel error code PLC-499 message, if active. Please refer to the PLC manufacturer's documentation for additional information.

| PLC Error Codes for Direct Logic – K-Sequence | |
|---|----------------------|
| Panel Error Code P499 Hex Value | Description |
| 01F8 | Error setting value. |
| 020D | Error in key mode. |
| 021C | Password protected. |

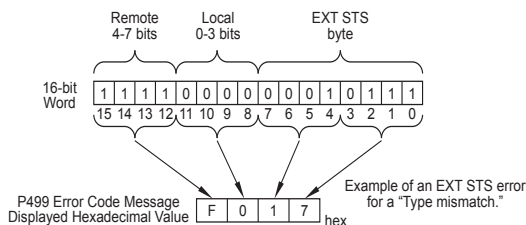
DirectLOGIC – DirectNET PLC Error Codes

There are no PLC generated errors that occur when using the **DirectNET** protocol.

Allen-Bradley Error Code P499 Explanation

The P499 error code is used to show any errors that are generated by the connected PLC. The P499 error message includes a four digit hexadecimal value displayed at the end of the message. This value can be looked up in the specific PLC's error tables to determine the cause of the error. The possible PLC generated error codes for the Allen-Bradley DF1 and DH485 communication protocol is represented by a hexadecimal value as shown in the following diagram. Please note that the error code is broken down into three sections. It is possible for more than one type of PLC error to be displayed in this value.

AB DF1 Protocol Error Code P499 Breakdown



AB DF1 Protocol – Multiple Error Code Examples

| | Example 1 | Example 2 | Example 3 |
|----------------------------|-----------|-----------|-----------|
| Remote 4-7 bits | F x x x | 1 x x x | F x x x |
| Local 0-3 bits | x 0 x x | x 1 x x | x 1 x x |
| EXT STS byte | x x 0 9 | x x 0 0 | x x 0 9 |
| Error P499 Value Displayed | F 0 0 9 | 1 1 0 0 | F 1 0 9 |

Allen-Bradley PLC Error Code Displayed Example:

Error Received = P499: Recv. Err Code 3200

Remote = 0x3000 = Remote node host is missing, disconnected or shut down.

Local - 0x0200 = Cannot Guarantee Delivery; Link Layer. The remote node specified does not ACK Command

EXT STS = 0000 = None

| | |
|----------------------------|---------|
| Remote 4-7 bits | 3 x x x |
| Local 0-3 bits | x 2 x x |
| EXT STS byte | x x 0 0 |
| Error P499 Value Displayed | 3 2 0 0 |



Allen-Bradley DF1 Protocol – PLC Error Code Tables

The following PLC error tables cover possible errors that are detected by the panel from Allen-Bradley PLCs using the DF1 protocol. This includes full and half duplex communications for the MicroLogix 1000, 1100, 1200, 1400 & 1500, SLC 5/03, /04, /05, ControlLogix, CompactLogix and FlexLogix, and full duplex communications for the PLC5.



NOTE: The following errors can be generated from the designated PLC, are monitored by the **C-more** Micro panel and displayed on the touch panel's screen as a hexadecimal value in panel error code PLC-499 message, if active. Please refer to the PLC manufacturer's documentation for additional information.

| PLC Errors for Allen-Bradley DF1 Protocol, Remote STS Errors (4-7 bits) | |
|---|--|
| Panel Error Code P499 Hex Value | Description |
| 0x0 | Success; no error. |
| 0x10 | Illegal command or format. |
| 0x20 | Host has a problem and will not communicate. |
| 0x30 | Remote node host is missing, disconnected, or shut down. |
| 0x40 | Host could not complete function due to hardware fault. |
| 0x50 | Addressing problem or memory protect rungs. |
| 0x60 | Function not allowed due to command protection selection. |
| 0x70 | Processor is in Program Mode. |
| 0x80 | Compatibility mode file missing or communication zone problem. |
| 0x90 | Remote node cannot buffer command. |
| 0xA0 | Wait ACK (1775 KA buffer full). |
| 0xB0 | Remote node problem due to download. |
| 0xC0 | Wait ACK (1775 KA buffer full). |
| 0xD0 | not used |
| 0xE0 | not used |
| 0xF0 | Error code in the EXT STS byte. See the error code table on the next page. |

| PLC Errors for Allen-Bradley DF1 Protocol, Local STS Errors (0-3 bits) | |
|--|---|
| Panel Error Code P499 Hex Value | Description |
| 0x0 | Success; no error. |
| 0x1 | DST node is out of buffer space. |
| 0x2 | Cannot guarantee delivery; link layer. (The remote node specified does not ACK command.) |
| 0x3 | Duplicate token holder detected. |
| 0x4 | Local port is disconnected. |
| 0x5 | Application layer timed out waiting for response. |
| 0x6 | Duplicate node detected. |
| 0x7 | Station is offline. |
| 0x8 | Hardware fault. |

PLC generated error code for the Allen-Bradley DF1 Protocol continue on the next page.

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Allen-Bradley DF1 Protocol – PLC Error Code Tables (cont'd)

| PLC Errors for Allen-Bradley DF1 Protocol, EXT STS Command Code for F0 Command | |
|--|---|
| Panel Error Code P499 Hex Value | Description |
| 0x0 | not used |
| 0x1 | A field has an illegal value. |
| 0x2 | Fewer levels specified in address than minimum for any address. |
| 0x3 | More levels specified in address than system supports. |
| 0x4 | Symbol not found. |
| 0x5 | Symbol is of improper format. |
| 0x6 | Address does not point to something usable. |
| 0x7 | File is wrong size. |
| 0x8 | Cannot complete request; situation has changed since start of the command. |
| 0x9 | Data or file size is too large. |
| 0xA | Transaction size plus word address is too large. |
| 0xB | Access denied; improper privilege. |
| 0xC | Condition cannot be generated; resource is not available. |
| 0xD | Condition already exists; resource is readily available. |
| 0xE | Command cannot be executed. |
| 0xF | Histogram overflow. |
| 0x10 | No access. |
| 0x11 | Illegal data type. |
| 0x12 | Invalid parameter or invalid data. |
| 0x13 | Address reference exists to deleted area. |
| 0x14 | Command execution failure for unknown reason; possible PLC 3 histogram overflow. |
| 0x15 | Data conversion error. |
| 0x16 | Scanner not able to communicate with 1771 rack adapter. |
| 0x17 | Type mismatch. |
| 0x18 | 1771 module response was not valid. |
| 0x19 | Duplicated label. |
| 0x22 | Remote rack fault. |
| 0x23 | Timeout. |
| 0x24 | Unknown error. |
| 0x1A | File is open; another node owns it. |
| 0x1B | Another node is the program owner. |
| 0x1C | Reserved |
| 0x1D | Reserved |
| 0x1E | Data table element protection violation. |
| 0x1F | Temporary internal problem. |

Allen-Bradley DH485 Protocol – PLC Error Code Tables

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The following PLC error code tables cover possible errors that are detected by the panel from Allen-Bradley PLCs using the DH485 protocol. This includes all MicroLogix and SLC500 PLCs, and any communication connection using an Allen-Bradley AIC device using the DH485 protocol.



NOTE: The following errors can be generated from the designated PLC, are monitored by the **C-more** Micro panel and displayed on the touch panel's screen as a hexadecimal value in panel error code PLC-499 message, if active. Please refer to the PLC manufacturer's documentation for additional information.

PLC Errors for Allen-Bradley DH485 Protocol, Remote STS Errors (4-7 bits)

| Panel Error Code P499 Hex Value | Description |
|------------------------------------|--|
| 0x0 | Success; no error. |
| 0x10 | Illegal command or format. |
| 0x20 | Host has a problem and will not communicate. |
| 0x30 | Remote node host is missing, disconnected, or shut down. |
| 0x40 | Host could not complete function due to hardware fault. |
| 0x50 | Addressing problem or memory protect rungs. |
| 0x60 | Function not allowed due to command protection selection. |
| 0x70 | Processor is in Program Mode. |
| 0x80 | Compatibility mode file missing or communication zone problem. |
| 0x90 | Remote node cannot buffer command. |
| 0xA0 | Wait ACK (1775 KA buffer full). |
| 0xB0 | Remote node problem due to download. |
| 0xC0 | Wait ACK (1775 KA buffer full). |
| 0xD0 | not used |
| 0xE0 | not used |
| 0xF0 | Error code in the EXT STS byte. See the error code table on the next page. |

PLC Errors for Allen-Bradley DH485 Protocol, Local STS Errors (0-3 bits)

| Panel Error Code P499 Hex Value | Description |
|------------------------------------|---|
| 0x0 | Success; no error. |
| 0x1 | DST node is out of buffer space. |
| 0x2 | Cannot guarantee delivery; link layer. (The remote node specified does not ACK command.) |
| 0x3 | Duplicate token holder detected. |
| 0x4 | Local port is disconnected. |
| 0x5 | Application layer timed out waiting for response. |
| 0x6 | Duplicate node detected. |
| 0x7 | Station is offline. |
| 0x8 | Hardware fault. |

PLC generated error codes for the Allen-Bradley DH485 protocol continue on the next page.

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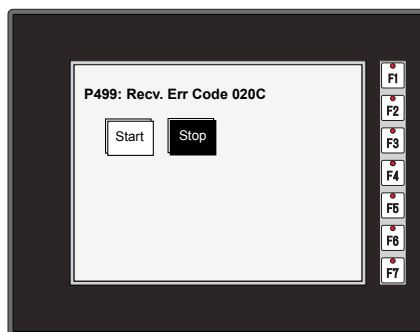
Allen-Bradley DH485 Protocol – PLC Error Code Tables (cont'd)

| PLC Errors for Allen-Bradley DH485 Protocol, EXT STS Command Code for F0 Command | |
|--|---|
| Panel Error Code P499 Hex Value | Description |
| 0x7 | Insufficient memory module size (0000h is returned). |
| 0xB | Access denied; privilege violation. |
| 0xC | Resource not available or cannot do. |
| 0xE | CMD cannot be executed. |
| 0x12 | Invalid parameter. |
| 0x14 | Failure during processing. |
| 0x19 | Duplicate label. |
| 0x1A | File open by another node + owner's local node address, 1 byte. |
| 0x1B | Program owned by another node + program owner's local node address, 1 byte. |

GE Error Code P499 Explanation

The P499 error code is used to show any errors that are generated by the connected PLC. The P499 error message includes a four digit hexadecimal value displayed at the end of the message. This value can be looked up in the specific PLC's error tables to determine the cause of the error. The possible PLC generated error codes for the GE 90-30, 90-70, Micro 90 and VersaMax Micro SNPX communication protocols breakdown into a four digit hexadecimal value.

GE Error Code P499 Message Example:



GE SNPX Protocol – PLC Error Code Tables

The following table lists the errors that can be generated by the GE 90-30, 90-70 and VersaMax PLC when using the SNPX protocol.



NOTE: The following errors can be generated from the designated PLC, are monitored by the **C-more** Micro panel and displayed on the touch panel's screen as a hexadecimal value in panel error code PLC-499 message, if active. Please refer to the PLC manufacturer's documentation for additional information.

| PLC Errors for GE SNPX Protocol (Major) | |
|---|--|
| Panel Error Code P499 Hex Value | Description |
| No error | Successful completion. (This is the expected completion value in the COMMREQ Status Word.) |
| 0x0002 | Insufficient Privilege. For Series 90-70 PLC, the minor error code contains the privilege level required for the service request. |
| 0x0004 | Protocol Sequence Error. The CPU has received a message that is out of order. |
| 0x0005 | Service Request Error, the minor error code contains the specific error code. |
| 0x0006 | Illegal Mailbox Type. Service request mailbox type is either undefined or unexpected. |
| 0x0007 | The PLC CPU's Service Request Queue is full. The master should retry later. It is recommended that the master wait a minimum of 10 msec before sending another service request. |
| 0x000A | SNP DOS Driver Error. The minor error code contains the specific error code. |
| 0x000B | Illegal Service Request. The requested service is either not defined or not supported. (This value is returned in lieu of the actual 01h value passed in the SNP error message, to avoid confusion with the normal successful COMMREQ completion.) |
| 0x000C | Local SNP/SNP-X Error. An error occurred within the SNP task in the CMM module in this PLC. This error may occur in either an SNP master or an SNP slave. The minor error code contains the specific error code. |
| 0x000D | Remote SNP Error. An error occurred within the SNP slave task in the CMM module in the remote PLC. The minor error code contains the specific error code. |
| 0x000E | Autodial Error. An error occurred while attempting to send a command string to an attached external modem. The minor error code contains the specific error code. |
| 0x000F | SNP-X slave error. An error occurred within the SNPX task in the remote slave device. The minor error code contains the specific error code. |
| 0x0013 | Port configurator error. |
| 0x0050 | Problem with sending mail to the slave Service Request task. (Series 90-70 PLC CPUs only) |
| 0x0051 | Problem with getting mail from the slave Service Request task. (Series 90-70 PLC CPUs only) |
| 0x0055 | Slave SNP task timed out before receiving an SRP response. (Series 90-70 PLC CPUs only) |
| 0x0056 | Slave SNP task could not find the requested datagram connection. (Series 90-70 PLC CPUs only) |
| 0x0057 | Slave SNP task encountered an error in trying to write the datagram. (Series 90-70 PLC CPUs only) |
| 0x0058 | Slave SNP task encountered an error in trying to update the datagram. (Series 90-70 PLC CPUs only) |

PLC generated error codes for the GE 90-30, 90-70 and VersaMax SNPX protocol continue on the next page.

GE SNPX Protocol – PLC Error Code Tables (cont'd)

| PLC Errors for GE SNPX Protocol (Minor-Major) (cont'd) | |
|--|--|
| Panel Error Code P499 Hex Value | Description |
| PLC Error 0x010C | WAIT-type COMMREQ is not permitted; must use NOW AIT-type. |
| PLC Error 0x010E | Not used |
| PLC Error 0x010F | The service request code in an X-Request message is unsupported or invalid at this time. This error may occur if an SNP-X communication session has not been successfully established at the slave device. |
| PLC Error 0x020C | COMMREQ command is not supported. |
| PLC Error 0x020E | The modem command string length exceeds 250 characters. |
| PLC Error 0x020F | Insufficient privilege level in the slave PLC CPU for the requested SNP-X service. Password protection at PLC CPU may be preventing the requested service. |
| PLC Error 0x0213 | Unsupported COMMREQ. These errors are only generated when there is no protocol currently being run on a port, and the port receives a COMMREQ. (The port may be disabled or an error has occurred in processing a new configuration). |
| PLC Error 0x030C | SNP communication is not active. Must initiate a new SNP communication by sending an Attach or Long Attach COMMREQ. |
| PLC Error 0x030E | COMMREQ Data Block Length is too small. Output command string data is missing or incomplete. |
| PLC Error 0x030F | Invalid slave memory type in X-Request message. |
| PLC Error 0x0313 | Invalid COMMREQ length. |
| PLC Error 0x040C | SNP slave did not respond to Attach message from master. |
| PLC Error 0x040E | Serial output timeout. The CMM module was unable to transmit the modem autodial output from the serial port. (May be due to missing CTS signal when the CMM is configured to use hardware flow control.) |
| PLC Error 0x040F | Invalid slave memory address or range in X-Request message. |
| PLC Error 0x0413 | Invalid COMMREQ status word location. |
| PLC Error 0x050C | Unable to write SNP Status Word to local PLC memory; may be due to invalid Status Word memory type or address. |
| PLC Error 0x050E | Response was not received from modem. Check modem and cable. |
| PLC Error 0x050F | Invalid data length in X-Request message. Data length must be non-zero, and may not exceed decimal 1000 bytes. |
| PLC Error 0x0513 | Invalid COMMREQ data. |
| PLC Error 0x060C | Master device memory type is not valid in this PLC. |
| PLC Error 0x060E | Modem responded with BUSY. Modem is unable to complete the requested connection. The remote modem is already in use; retry the connection request at a later time. |
| PLC Error 0x060F | X-Buffer data length does not match the service request in X-Request message. The X-Buffer message length is obtained from the Next Message Length field in the X-Request message; the length of the data within the buffer message is always the message length. |
| PLC Error 0x070C | Master device memory address or length is zero. |
| PLC Error 0x070E | Modem responded with NO CARRIER. Modem is unable to complete the requested connection. Check the local and remote modems and the telephone line. |
| PLC Error 0x070F | Queue Full indication from Service Request Processor in slave PLC CPU. The slave is temporarily unable to complete the service request. The master should try again later. It is recommended that the master wait at least 10 msec before repeating the X-Request. |

PLC generated error codes for the GE 90-30, 90-70 and VersaMax SNPX protocol continued on the next page.

GE SNPX Protocol – PLC Error Code Tables (cont'd)

A

| PLC Errors for GE SNPX Protocol (Minor-Major) (cont'd) | |
|--|--|
| Panel Error Code P499 Hex Value | Description |
| 0x080C | Unable to read or write master device memory locations specified in COMMREQ. Usually caused by invalid memory address for this PLC. SNP message exchange may have taken place. |
| 0x080E | Modem responded with NO DIALTONE. Modem is unable to complete the requested connection. Check the modem connections and the telephone line. |
| 0x080F | Service Request Processor response exceeds 1000 bytes; the SNP-X slave device cannot return the data in an X-Response message. (This error applies to CMM module only.) |
| 0x090C | Master device memory data length exceeds maximum data size of CMM module (2048 bytes). Must use a smaller data length. Use multiple COMMREQs if total data length exceeds this maximum value. |
| 0x090E | Modem responded with ERROR. Modem is unable to complete the requested command. Check the modem command string and modem. |
| 0x0A0C | Slave device memory type is missing or not valid. |
| 0x0A0E | Modem responded with RING, indicating that the modem is being called by another modem. Modem is unable to complete the requested command. Retry the modem command at a later time. |
| 0x0B0C | Slave device memory address is missing or zero. |
| 0x0B0E | An unknown response was received from the modem. Modem is unable to complete the requested command. Check the modem command string and modem. The modem response is expected to be either CONNECT or OK. |
| 0x0C0C | COMMREQ Data Block Length is too small. (When expected COMMREQ length is 6 words or less. An improper length may cause other minor error codes 6-11.) |
| 0x0D0C | Invalid Diagnostic Status Word (DSW) starting word or length. |
| 0x0E0C | Invalid maximum SNP message data size. Must be an even value from 42 to 2048. |
| 0x0F0C | Invalid Privilege Level. Must be 0 through 4 or -1. |
| 0x100C | Invalid Fault Table selector. Must be 1 for I/O Fault Table, or 2 for PLC Fault Table. |
| 0x100F | Unexpected Service Request Processor error. (This error applies to CMM module only; the unexpected SRP error code is saved in the Diagnostic Status Words in the CMM module.) |
| 0x110C | Invalid Fault Table starting index. Must be 1-32 for I/O Fault Table, or 1-16 for PLC. |
| 0x120C | Invalid fault count. Must be 1-32 for I/O Fault Table, or 1-16 for PLC Fault Table. |
| 0x130C | Invalid Set PLC Date/Time mode. Must be 1-4. |
| 0x140C | Invalid Set PLC Date/Time date, time, or day-of-week value. |
| 0x150C | Unable to retrieve master device PLC time/date from PLC CPU. |
| 0x150F | Requested service is not permitted in a Broadcast request. The master must direct the X-Request message to a specific SNP-X slave device. |
| 0x160C | Invalid slave PLC type. Must be 0 for Series 90-70, or 1 for Series 90-30 or Series 90-20. |
| 0x170C | Invalid datagram type. Must be 01h for normal datagram, or 81h (129) for permanent datagram. |
| 0x180C | Missing or too many datagram point formats. Must be 1-32. |
| 0x190C | Invalid datagram point format data. |

PLC generated error codes for the GE 90-30, 90-70 and VersaMax SNPX protocol continue on the next page.

GE SNPX Protocol – PLC Error Code Tables (cont'd)

A

| PLC Errors for GE SNPX Protocol (Minor-Major) (cont'd) | |
|--|--|
| Panel Error Code P499 Hex Value | Description |
| 0x1A0C | Datagram area size is too small to include data for all specified point formats. |
| 0x1B0C | Invalid number of Control Program Names. Must be 1-8. |
| 0x1C0C | SNP-X Request exceeds maximum data size (1000 bytes). Must use a smaller data length. Use multiple COMMREQs if necessary. |
| 0x1D0C | Invalid SNP-X communication session type. Must be 0 for a single slave device, or 1 for multiple slave devices. |
| 0x1E0C | Illegal destination SNP ID specified for SNP-X slave. Must be 0-7 ASCII characters, plus a terminating null character (00h). The Null SNP ID (eight bytes of 00h) may be used to specify any single device. The Broadcast SNP ID (eight bytes of FFh) may be used to specify all slave devices on the serial link. |
| 0x1F0C | Destination SNP ID does not match SNP-X session type. The Broadcast SNP ID is not permitted in a single-slave SNP-X session. The Null SNP ID is not permitted in a multiple-slave SNP-X session. |
| 0x200C | Inactivity timeout (T3'). The SNP slave has not received any new SNP messages within the configured T3' time interval. |
| 0x200F | Invalid Message Type field in a received X-Request message. The message type of an X-Request message must be 58h = 'X'. |
| 0x210C | A Parity error has occurred on an Attach, Attach Response, or Update Real-time Datagram message. Communications have not been established. |
| 0x210F | Invalid Next Message Type or Next Message Length field in a received X Request message. If this request does not use a buffer (0-2 bytes of data), the Next Message Type must be zero. If this request will be followed with a buffer message (more than 2 byte.), the Next Message Type must be 54h = 'T', and the Next Message Length must specify the length of the X-Buffer message. Valid X-Buffer message lengths are 9-1008 bytes (data length plus 8 bytes). |
| 0x220C | A BCC (Block Check Code) error has occurred on an Attach, Attach Response, or Update Realtime Datagram message. Communications have not been established. |
| 0x220F | Invalid Message Type field in a received X-Buffer message. The message type of an X-Buffer message must be 54h = 'T'. |
| 0x230C | A Framing or Overrun serial error has occurred on an Attach, Attach Response, or Update Realtime Datagram message. Communications have not been established. |
| 0x230F | Invalid Next Message Type field in a received X-Buffer message. Since an X-Buffer message is never followed by another message, the Next Message Type must always be zero. |
| 0x240C | An invalid SNP message type was received when an Attach, Attach Response, or Update Realtime Datagram message was required. Communications have not been established. |
| 0x250C | An invalid next message length value was specified in an Attach, Attach Response, or Update Realtime Datagram message. Communications have not been established. |
| 0x260C | An unexpected SNP message type was received when an Attach, Attach Response, or Update Realtime Datagram was required. Communications have not been established. |
| 0x270C | Another Break was received while SNP slave was waiting for an Attach or Update Realtime Datagram message. |
| 0x280C | An SNP message has been sent and retried the maximum number of times. A maximum of two retries are permitted. A retry is caused by a NAK from the remote SNP device. |
| 0x290C | A received SNP message has been NAKed the maximum number of two times. The NAKed message may be retransmitted a maximum of two times. |

PLC generated error codes for the GE 90-30, 90-70 and VersaMax SNPX protocol continue on the next page.

GE SNPX Protocol – PLC Error Code Tables (cont'd)

A

| PLC Errors for GE SNPX Protocol (Minor-Major) (cont'd) | |
|--|---|
| Panel Error Code P499 Hex Value | Description |
| 0x2A0C | An unknown message was received when an acknowledge (ACK or NAK) was required. |
| 0x2B0C | Sequence Error. An unexpected SNP message type was received. |
| 0x2C0C | Received SNP message contains bad next message length value. |
| 0x2D0C | Acknowledge timeout. An acknowledge (ACK or NAK) was not received within the configured T2 time interval. A slave device may generate this error if the master device has aborted after maximum response NAKs and does not NAK the next response retry. |
| 0x2E0C | Response timeout. The SNP Master did not receive an SNP Response message within the configured T5' time interval. |
| 0x2F0C | Buffer message timeout. An expected Text Buffer or Connection Data message was not received within the configured T5" time interval. |
| 0x300C | Serial output timeout. The CMM module was unable to transmit a Break, an SNP message, or SNP acknowledge (ACK or NAK) from the serial port. (May be due to missing CTS signal when the CMM module is configured to use hardware flow control.) |
| 0x310C | SNP slave did not receive a response from the Service Request Processor in the PLC CPU. |
| 0x320C | COMMREQ timeout. The COMMREQ did not complete within the configured time interval. |
| 0x330C | An SNP Request or Response was aborted prior to completion due to reception of a Break. |
| 0x340C | PLC backplane communications error |
| 0x350C | Invalid Piggyback Status data memory type or address. Communications have not been established. |
| 0x360C | Invalid SNP Slave SNP ID. Must be a 0-7 ASCII characters, plus a terminating null character (00h). The Null SNP ID (eight bytes of 00h) may be used to specify any single slave device. |
| 0x370C | The SNP master has received a response message containing an unexpected data length. Usually indicates a problem with the remote SNP slave device. May occur when Series 90-70 commands (Task Memory or Program Block Memory Read/Write) are issued to a Series 90-30 slave device. |
| 0x380C | Response code in received SNP-X response message does not match expected value. (Response code must equal the request code +80h.) |
| 0x390C | SNP-X Response message exceeds maximum data size (decimal 1000 bytes). Data in the Response is ignored. |
| 0x400C | A parity error has occurred on an X-Attach Response message when establishing a new SNP-X communication session. Communications have not been established. |
| 0x400D | The requested service is not supported by the SNP slave. |
| 0x400F | Serial output timeout. The slave was unable to transmit an SNP-X message from the serial port. (May be due to missing CTS signal when the CMM module is configured to use hardware flow control.) |

PLC generated error codes for the GE Fanuc 90-30, 90-70 and VersaMax SNPX protocol continue on the next page.

GE SNPX Protocol – PLC Error Code Tables (cont'd)

A

| PLC Errors for GE SNPX Protocol (Minor-Major) (cont'd) | |
|--|--|
| Panel Error Code P499 Hex Value | Description |
| 0x410C | A framing or overrun error has occurred on an X-Attach Response message when establishing a new SNP-X communication session. Communications have not been established. |
| 0x410D | SNP slave on CMM module requires PLC CPU privilege level 2 to operate. The SNP slave has rejected a request to change to a higher or lower privilege level. |
| 0x410F | An SNP-X request was aborted prior to completion due to reception of a Break. |
| 0x420C | A BCC (Block Check Code) error has occurred on an X-Attach Response message when establishing a new SNP-X communication session. Communications have not been established. |
| 0x420D | SNP Request or Response message exceeds maximum data length of the CMM module. (Total data length for Mailbox and all following Buffer messages is 2048 bytes.) The master must use a smaller data length. Use multiple requests if total data length exceeds the maximum value. |
| 0x420F | An X-Buffer message was received containing greater than 1000 bytes of data. The data is ignored. |
| 0x430C | An invalid message type was received when an X-Attach Response was required when establishing a new SNP-X communication session. Communications have not been established. |
| 0x430D | Improper Write Datagram message format. Series 90-70 slave devices use a different format for this message than Series 90-30 or Series 90-20 slave devices. The master must use the proper message format for this SNP slave device. (The SNP master in the CMM module sends this message as part of the Establish Datagram COMMREQ command. The datagram has been partially established, but is not usable; the datagram should be cancelled by using the Datagram ID returned by the COMMREQ.) |
| 0x430F | The SNP-X slave did not receive a response from the Service Request Processor in the PLC CPU. |
| 0x440C | An invalid next message type value was detected in an X-Attach Response message when establishing a new SNP-X communication session. Communications have not been established. |
| 0x440D | A datagram error occurred in a Series 90-70 slave device (dual-port error). |
| 0x440F | PLC backplane communications error. |
| 0x450C | An invalid response code was detected in an X-Attach Response message when establishing a new SNP-X communication session. Communications have not been established. |
| 0x460C | An expected X-Attach Response message was not received within the response timeout interval when establishing a new SNP-X communication session. The master has retried the X-Attach message twice without receiving a response. Communications have not been established. |
| 0x500C | A parity error has occurred on an X-Attach Response message when re-establishing an existing SNP-X communication session. Communications have not been established. |
| 0x500F | A parity error has occurred in a received X-Attach message. |
| 0x510C | A framing or overrun error has occurred on an X-Attach Response message when re-establishing an existing SNP-X communication session. Communications have not been established. |
| 0x510F | A framing or overrun error has occurred in a received X-Attach message. |
| 0x520C | A BCC (Block Check Code) error has occurred on an X-Attach Response message when re-establishing an existing SNP-X communication session. Communications have not been established. |
| 0x520F | A BCC (Block Check Code) error has occurred in a received X-Attach message. |

PLC generated error codes for the GE Fanuc 90-30, 90-70 and VersaMax SNPX protocol continue on the next page.

GE SNPX Protocol – PLC Error Code Tables (cont'd)

A

| PLC Errors for GE SNPX Protocol (Minor-Major) (cont'd) | |
|--|---|
| Panel Error Code P499 Hex Value | Description |
| 0x530C | An invalid message type was received when an X-Attach Response was required when re-establishing an existing SNP-X communication session. Communications have not been established. |
| 0x530F | An invalid Message Type was received when an X-Attach message was required. (For an X-Attach message, the message type must be 58h = 'T'.) |
| 0x540C | An invalid Next Message Type value was detected in an X-Attach Response message when re-establishing an existing SNP-X communication session. Communications have not been established. |
| 0x540F | An invalid Next Message Type value was detected in a received X-Attach message. (For an X-Attach message, the Next Message Length must be zero.) |
| 0x550C | An invalid response code was detected in an X-Attach Response message when re-establishing an existing SNP-X communication session. Communications have not been established. |
| 0x550F | An invalid request code was detected in a received X-Attach message. |
| 0x560C | An expected X-Attach Response message was not received within the response timeout interval when re-establishing an existing SNP-X communication session. The master has retried the X-Attach message twice without receiving a response. Communications have not been established. |
| 0x600C | A parity error has occurred on an X-Response message. |
| 0x600F | A parity error has occurred in a received X-Request message. |
| 0x610C | A framing or overrun error has occurred on an X-Response message. |
| 0x610F | A framing or overrun error has occurred in a received X-Request message. |
| 0x620C | A BCC (Block Check Code) error has occurred on an X-Response message. |
| 0x620F | A BCC (Block Check Code) error has occurred in a received X-Request message. |
| 0x630C | An invalid message type was received when an X-Response message was required. |
| 0x640C | An invalid next message type value was detected in an X-Response message. |
| 0x650C | An invalid response code was detected in an X-Response message. |
| 0x660C | An expected X-Response message was not received within the response time. |
| 0x700C | A parity error has occurred on an Intermediate Response message. |
| 0x700F | A parity error has occurred in a received X-Buffer message. |
| 0x710C | A framing or overrun error has occurred on an Intermediate Response message. |
| 0x710F | A framing or overrun error has occurred in a received X-Buffer message. |
| 0x720C | A BCC (Block Check Code) error has occurred on an Intermediate Response message. |
| 0x720F | A BCC (Block Check Code) error has occurred in a received X-Buffer message. |
| 0x730C | An invalid message type was received when an Intermediate Response message was required. |
| 0x730F | An expected X-Buffer message was not received. |
| 0x740C | An invalid next message type value was detected in an Intermediate Response message. |
| 0x750C | An invalid response code was detected in an Intermediate Response message. |
| 0x760C | An expected Intermediate Response message was not received within the response timeout interval. |

PLC generated error codes for the GE Fanuc 90-30, 90-70 and VersaMax SNPX protocol continue on the next page.

GE SNPX Protocol – PLC Error Code Tables (cont'd)

A

| PLC Errors for GE SNPX Protocol (Minor-Major) (cont'd) | |
|--|---|
| Panel Error Code P499 Hex Value | Description |
| 0x8D0A | Bad DOS Version. Must have DOS 2.0, or later, to support the SNP DOS Driver. |
| 0x8E0A | PC Serial port configured for SNP Master driver is not open; no communication can take place. |
| 0x8F0A | Out-of-Sequence SNP message. SNP message type received was not the type expected. |
| 0x900A | Bad SNP BCC encountered. Transmission was aborted after maximum retries due to a bad Block Check Code. |
| 0x910A | Bad SNP communication. Transmission was aborted after maximum retries due to serial errors (that is, parity, overrun, or framing errors). |
| 0x920A | No SNP communication. Either communication has been lost or a communication session has not been established. |
| 0xC105 | Invalid block state transition. |
| 0xC205 | The OEM key is NULL (inactive). |
| 0xC305 | Text length does not match traffic type. |
| 0xC405 | Verify with FA Card or EEPROM failed. |
| 0xC505 | No task-level Rack/Slot configuration to read or delete. |
| 0xC605 | Control Program (CP) tasks exist but requestor not logged into main CP. |
| 0xC705 | Passwords are set to inactive and cannot be enabled or disabled. |
| 0xC805 | Password(s) already enabled and can not be forced inactive. |
| 0xC905 | Login using non-zero buffer size required for block commands. |
| 0xCA05 | Device is write-protected. |
| 0xCB05 | A comm or write verify error occurred during save or restore. |
| 0xCC05 | Data stored on device has been corrupted and is no longer reliable. |
| 0xCD05 | Attempt was made to read a device but no data has been stored on it. |
| 0xCE05 | Specified device has insufficient memory to handle request. |
| 0xCF05 | Specified device is not available in the system (not present). |
| 0xD005 | One or more PLC modules configured have unsupported revision. |
| 0xD105 | Packet size or total program size does not match input. |
| 0xD205 | Invalid write mode parameter. |
| 0xD305 | User Program Module (UPM) read or write exceeded block end. |
| 0xD405 | Mismatch of configuration checksum. |
| 0xD505 | Invalid block name specified in datagram. |
| 0xD605 | Total datagram connection memory exceeded. |
| 0xD705 | Invalid datagram type specified. |
| 0xD805 | Point length not allowed. |
| 0xD905 | Transfer type invalid for this Memory Type selector. |
| 0xDA05 | Null pointer to data in Memory Type selector. |
| 0xDB05 | Invalid Memory Type selector in datagram. |
| 0xDC05 | Unable to find connection address. |
| 0xDD05 | Unable to locate given datagram connection ID. |
| 0xDE05 | Size of datagram connection invalid. |
| 0xDF05 | Invalid datagram connection address. |

PLC generated error codes for the GE Fanuc 90-30, 90-70 and VersaMax SNPX protocol continue on the next page.

GE SNPX Protocol – PLC Error Code Tables (cont'd)

| PLC Errors for GE SNPX Protocol (Minor-Major) (cont'd) | |
|--|--|
| Panel Error Code P499 Hex Value | Description |
| 0xE005 | Service in process cannot login. |
| 0xE105 | No I/O configuration to read or delete. |
| 0xE205 | IOS could not delete configuration, or bad type. |
| 0xE305 | CPU revision number does not match. |
| 0xE405 | Memory Type for this selector does not exist. |
| 0xE505 | DOS file area not formatted. |
| 0xE605 | CPU model number does not match. |
| 0xE705 | Configuration is not valid. |
| 0xE805 | No user memory is available to allocate. |
| 0xE905 | Memory Type selector not valid in context. |
| 0xEA05 | Not logged in to process service request. |
| 0xEB05 | Task unable to be deleted. |
| 0xEC05 | Task unable to be created. |
| 0xED05 | VME bus error encountered. |
| 0xEE05 | Could not return block sizes. |
| 0xEF05 | Programmer is already attached. |
| 0xF005 | Request only valid in stop mode. |
| 0xF105 | Request only valid from programmer. |
| 0xF205 | Invalid program cannot log in. |
| 0xF305 | I/O configuration mismatch. |
| 0xF405 | Invalid input parameter in request. |
| 0xF505 | Invalid password. |
| 0xF605 | Invalid sweep state to set. |
| 0xF705 | Required to log in to a task for service. |
| 0xF805 | Invalid Task Name referenced. |
| 0xF905 | Task address out of range. |
| 0xFA05 | Cannot replace I/O module. |
| 0xFB05 | Cannot clear I/O configuration. |
| 0xFC05 | I/O configuration is invalid. |
| 0xFD05 | Unable to perform auto configuration. |
| 0xFE05 | No privilege for attempted operation. |
| 0xFF05 | Service Request Error has been aborted. |

Mitsubishi FX Protocol – PLC Error Codes

Only errors as listed in the **C-more** Micro Panel Error Code Table shown on page A-3 can occur when using the Mitsubishi FX protocol, there are no PLC generated errors.

Mitsubishi Q / QnA Series – PLC Error Codes

The following table lists the errors that can be generated by the Mitsubishi Q / QnA Series PLC when using the Q / QnA protocol.



NOTE: The following errors can be generated from the designated PLC, are monitored by the **C-more** Micro panel and displayed on the touch panel's screen as a hexadecimal value in panel error code PLC-499 message, if active. Please refer to the PLC manufacturer's documentation for additional information.

| PLC Error Codes for Mitsubishi Q / QnA and Q Series | |
|---|---|
| Panel Error Code P499 Hex Value | Description |
| 0x4000 | Serial communications checksum error. Check cable and grounding. |
| 0x4001 | Unsupported request sent to PLC. |
| 0x4002 | Unsupported request sent to PLC. |
| 0x4003 | Global request sent to PLC that cannot be executed. |
| 0x4004 | System protect switch is on and request was sent that cannot be executed. Also PLC, may still be booting up. |
| 0x4005 | Packet sent is too large according to size request in header. |
| 0x4006 | Serial communications could not be initialized. |
| 0x4008 | CPU busy or buffer full. |
| 0x4010 | Request cannot be serviced while CPU is running. CPU must be stopped. |
| 0x4013 | Request cannot be serviced while CPU is running. CPU must be stopped. |
| 0x4021 | Drive memory does not exist. |
| 0x4022 | File (ZR memory) does not exist. |
| 0x4023 | File (ZR memory) name and File (ZR memory) number do not match. |
| 0x4024 | File (ZR memory) inaccessible by user. |
| 0x4025 | File (ZR memory) is locked by another device. |
| 0x4026 | File (ZR memory) password required. |
| 0x4027 | Specified range is out of File (ZR memory) range. |
| 0x4028 | File (ZR memory) already exist. |
| 0x4029 | Specified File (ZR memory) capacity cannot be retrieved. |
| 0x402A | Specified File (ZR memory) is abnormal. |
| 0x402B | The requested data cannot be executed in the specified drive memory. |
| 0x402C | The requested operation cannot be executed presently. |
| 0x4030 | The specified data type does not exist. Check the CPUs allowable data types. |
| 0x4031 | The specified address is out of range. The data type requested may need to be expanded in GX developer. The CPU may not allow this data type. |
| 0x4032 | Address qualification is incorrect. |
| 0x4033 | Cannot write to system area. |
| 0x4034 | Request cannot be executed because completion address for an instruction cannot be turned on. |

PLC generated error codes for the Mitsubishi Q / QnA protocol continue on the next page.

Mitsubishi Q / QnA Series – PLC Error Codes (cont'd)

A

| PLC Error Codes for Mitsubishi Q / QnA and Q Series | |
|---|---|
| Panel Error Code P499 Hex Value | Description |
| 0x4040 | Module doesn't support request. |
| 0x4041 | Request is out of module's range. |
| 0x4042 | Module cannot be accessed. |
| 0x4043 | Address for specified module is incorrect. |
| 0x4044 | Hardware problem exist for specified module. |
| 0x4050 | Request cannot be executed because memory card protect switch is on. |
| 0x4051 | Specified memory cannot be accessed. |
| 0x4052 | Specified memory attribute is read only and cannot be written to. |
| 0x4053 | Error occurred when writing to specified memory location. |
| 0x4080 | Request data error. Check cabling and electrical noise. |
| 0x4082 | Specified request is already being executed. |
| 0x408B | The remote request cannot be performed. |
| 0x40A0 | A block number out of range was specified. |
| 0x40A1 | The number of blocks requested exceeds the range of the PLC. |
| 0x40A2 | A step number was specified out of range. |
| 0x40A3 | Step range limit exceeded. |
| 0x40A4 | Specified sequence step number is out of range. |
| 0x40A5 | Specified SFC device is out of range. |
| 0x40A6 | Block specification and step specification are incorrect. |
| 0x4100 | CPU module hardware fault. |
| 0x4101 | Serial communication connection incorrect. |
| 0x4105 | CPU module internal memory fault. Bad CPU. |
| 0x4106 | CPU is in initialization. Wait until CPU is booted up. |
| 0x4107 | Specified function not supported by this CPU. Check memory types for that CPU. |
| 0x4110 | Specified function not supported because CPU is in Stop. Put CPU in Run. |
| 0x4111 | System is not up yet. Wait until system is up before performing request. |
| 0x4A01 | The network number specified does not exist. Routing not supported in C-more . |
| 0x4A02 | Station number specified does not exist. Routing not supported in C-more . |

Omron Error Code P499 Explanation

The P499 error code is used to show any errors that are generated by the connected PLC. The P499 error message includes a four digit hexadecimal value displayed at the end of the message. This value can be looked up in the specific PLC's error tables to determine the cause of the error. The possible PLC generated error codes for the Omron Host Link communication protocols breakdown into a four digit hexadecimal value.

Omron Error Code P499 Message Example:



Omron Host Link Protocol – PLC Error Code Table

The following table lists the errors that can be generated by the Omron PLC when using the Host Link protocol.



NOTE: The following errors can be generated from the designated PLC, are monitored by the **C-more** Micro panel and displayed on the touch panel's screen as a hexadecimal value in panel error code PLC-499 message, if active. Please refer to the PLC manufacturer's documentation for additional information.

| PLC Error Codes for Omron Host Link | |
|-------------------------------------|---|
| Panel Error Code P499 Hex Value | Description |
| 0x00 | Normal Completion. |
| 0x01 | Not executable in RUN mode. |
| 0x02 | Not executable in MONITOR mode. |
| 0x03 | Not executable with PROM mounted. |
| 0x04 | Address over (data overflow). |
| 0x0B | Not executable in PROGRAM mode. |
| 0x0C | Not executable in DEBUG mode. |
| 0x0D | Not executable in LOCAL mode. |
| 0x10 | Parity error. |
| 0x11 | Framing error. |
| 0x12 | Overrun. |
| 0x13 | FCS error. |
| 0x14 | Format error (parameter length error). |
| 0x15 | Entry number data error (parameter error, data code error, data length error). |
| 0x16 | Instruction not found. |
| 0x18 | Frame length error. |
| 0x19 | Not executable (due to Un-executable error clear, non-registration of I/O table, etc.). |
| 0x20 | I/O table generation impossible (unrecognized remote I/O unit, channel over, duplication of optical transmitting I/O unit). |
| 0xA0 | Abort due to parity error in transmit data under process. |
| 0xA1 | Abort due to framing error in transmit data under process. |
| 0xA2 | Abort due to overrun in transmit data under process. |
| 0xA3 | Abort due to FCS error in transmit data under process. |
| 0xA4 | Abort due to format error in transmit data under process. |
| 0xA5 | Abort due to frame length error in transmit data under process. |
| 0xA8 | Abort due to entry number data error in transmit data under process. |
| 0xB0 | Un-executable due to program area capacity other than 16k bytes. |

Omron FINS Protocol – PLC Error Code Table

The following table lists the errors that can be generated by the Omron PLC when using the FINS protocol.



NOTE: The following errors can be generated from the designated PLC, are monitored by the **C-more** Micro panel and displayed on the touch panel's screen as a hexadecimal value in panel error code PLC-499 message, if active. Please refer to the PLC manufacturer's documentation for additional information.

| PLC Error Codes for Omron FINS | |
|------------------------------------|--|
| Panel Error Code P499 Hex Value | Description |
| 0x0000 | Normal Completion. |
| 0x0001 | Service Canceled. |
| 0x0101 | Local Error: Local node not in network. |
| 0x0102 | Local Error: Token Timeout. |
| 0x0103 | Local Error: Retries Failed. |
| 0x0104 | Local Error: Too many send frames. |
| 0x0105 | Local Error: Node address range error. |
| 0x0106 | Local Error: Node Address Duplication. |
| 0x0201 | Destination Node Error: Destination Node not in network. |
| 0x0202 | Destination Node Error: Unit Missing. |
| 0x0203 | Destination Node Error: Third Node missing. |
| 0x0204 | Destination Node Error: Destination Node busy. |
| 0x0205 | Destination Node Error: Response Timeout. |
| 0x0301 | Controller Error: Communications Controller Error. |
| 0x0302 | Controller Error: CPU Unit Error. |
| 0x0303 | Controller Error: Controller Error. |
| 0x0304 | Controller Error: Unit number Error. |
| 0x0401 | Service Unsupported: Undefined Command. |
| 0x0402 | Service Unsupported: Not supported by Model/Version. |
| 0x0501 | Routing Table Error: Destination address setting error. |
| 0x0502 | Routing Table Error: No routing tables. |
| 0x0503 | Routing Table Error: Routing table error. |
| 0x0504 | Routing Table Error: Too many delays. |
| 0x1001 | Command Format Error: Command too long. |
| 0x1002 | Command Format Error: Command too short. |
| 0x1003 | Command Format Error: Elements/Data don't match. |
| 0x1004 | Command Format Error: Command format error. |
| 0x1005 | Command Format Error: Header Error. |
| 0x1101 | Parameter Error: Area classification missing. |
| 0x1102 | Parameter Error: Access Size Error. |
| 0x1103 | Parameter Error: Address range error. |

PLC generated error codes for the Omron FINS protocol continue on the next page.

Omron FINS Protocol – PLC Error Code Table (cont'd)

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| PLC Error Codes for Omron FINS | |
|------------------------------------|--|
| Panel Error Code P499 Hex Value | Description |
| 0x1104 | Parameter Error: Address range exceeded. |
| 0x1106 | Parameter Error: Program Missing. |
| 0x1109 | Parameter Error: Relational Error. |
| 0x110A | Parameter Error: Duplicate Data Access. |
| 0x110B | Parameter Error: Response too long. |
| 0x110C | Parameter Error: Parameter Error. |
| 0x2002 | Read Not Possible: Protected. |
| 0x2003 | Read Not Possible: Table missing. |
| 0x2004 | Read Not Possible: Data missing. |
| 0x2005 | Read Not Possible: Program missing. |
| 0x2006 | Read Not Possible: File missing. |
| 0x2007 | Read Not Possible: Data mismatch. |
| 0x2101 | Write Not Possible: Read Only. |
| 0x2102 | Write Not Possible: Protected - cannot write data link table. |
| 0x2103 | Write Not Possible: Cannot register. |
| 0x2105 | Write Not Possible: Program missing. |
| 0x2106 | Write Not Possible: File missing. |
| 0x2107 | Write Not Possible: File name already exists. |
| 0x2108 | Write Not Possible: Cannot change. |
| 0x2201 | Not executable in current mode: Not possible during execution. |
| 0x2202 | Not executable in current mode: Not possible while running. |
| 0x2203 | Not executable in current mode: Wrong PLC mode (Program). |
| 0x2204 | Not executable in current mode: Wrong PLC mode (Debug). |
| 0x2205 | Not executable in current mode: Wrong PLC mode (Monitor). |
| 0x2206 | Not executable in current mode: Wrong PLC mode (Run). |
| 0x2207 | Not executable in current mode: Specified node not polling node. |
| 0x2208 | Not executable in current mode: Step cannot be executed. |
| 0x2301 | No such device: File device missing. |
| 0x2302 | No such device: Missing memory. |
| 0x2303 | No such device: Clock missing. |
| 0x2401 | Cannot Start/Stop: Table missing. |
| 0x2502 | Unit Error: Memory Error. |
| 0x2503 | Unit Error: I/O setting Error. |
| 0x2504 | Unit Error: Too many I/O points. |
| 0x2505 | Unit Error: CPU bus error. |
| 0x2506 | Unit Error: I/O Duplication. |

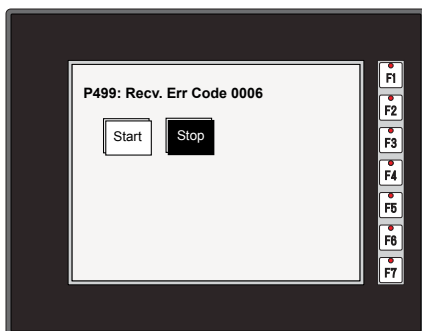
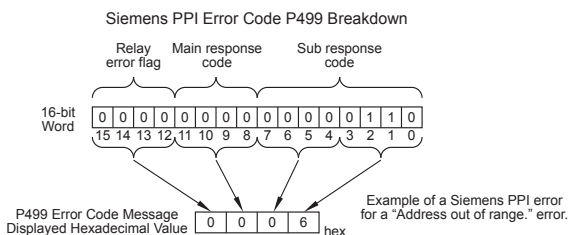
PLC generated error codes for the Omron FINS protocol continue on the next page.

Omron FINS Protocol – PLC Error Code Table (cont'd)

| PLC Error Codes for Omron FINS | |
|------------------------------------|--|
| Panel Error Code P499 Hex Value | Description |
| 0x2507 | Unit Error: I/O bus error. |
| 0x2509 | Unit Error: SYSMAC BUS/2 error. |
| 0x250A | Unit Error: CPU Bus Unit Error. |
| 0x250D | Unit Error: SYSMAC BUS No. duplication. |
| 0x250F | Unit Error: Memory Error. |
| 0x2510 | Unit Error: SYSMAC BUS terminator missing. |
| 0x2601 | Command Error: No protection. |
| 0x2602 | Command Error: Incorrect password. |
| 0x2604 | Command Error: Protected. |
| 0x2605 | Command Error: Service already executing. |
| 0x2606 | Command Error: Service stopped. |
| 0x2607 | Command Error: No execution right. |
| 0x2608 | Command Error: Settings not complete. |
| 0x2609 | Command Error: Necessary items not set. |
| 0x260A | Command Error: Number already defined. |
| 0x260B | Command Error: Error will not clear. |
| 0x3001 | Access Right Error: No access right. |
| 0x4001 | Abort: Service aborted. |

Siemens Error Code P499 Explanation

The P499 error code is used to show any errors that are generated by the connected PLC. The P499 error message includes a four digit hexadecimal value displayed at the end of the message. This value can be looked up in the specific PLC's error tables to determine the cause of the error. The possible PLC generated error codes for the Siemens PPI communication protocols breakdown into a four digit hexadecimal value as shown in the following diagram.



Siemens PPI Protocol – PLC Error Code Table

| PLC PDU Header Errors for S7-200 PPI | |
|--------------------------------------|--|
| Panel Error Code P499 Hex Value | Description |
| 0x0001 | Hardware Fault. |
| 0x0003 | Object access not allowed. |
| 0x0004 | Context not supported. |
| 0x0005 | Address out of range. |
| 0x0006 | Address out of range. |
| 0x0007 | Write Data size mismatch. |
| 0x000A | Object does not exist. |
| 0x8000 | Function being used. |
| 0x8001 | Action is not allowed in current mode. |
| 0x8101 | Hardware fault. |
| 0x8103 | Access not allowed. |
| 0x8104 | Function not supported. |
| 0x8105 | Address invalid. |
| 0x8106 | Data Type not supported. |
| 0x8107 | Data Type is not consistent with size. |
| 0x810A | Object does not exist. |
| 0x8500 | PDU Size is incorrect. |
| 0x8702 | Address is invalid. |
| 0xD201 | Block name syntax error. |
| 0xD202 | Error with function parameter. |
| 0xD203 | Error with block type. |
| 0xD204 | No linked block. |
| 0xD205 | Object already exists. |
| 0xD206 | Object already exists. |
| 0xD207 | Block already used in EPROM. |
| 0xD209 | Block does not exist. |
| 0xD20E | No Block does not exist. |
| 0xD210 | Block number incorrect. |

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