# PRODUCTIVITY®1000 ERROR CODES



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#### **Communications Error Codes**

| Error<br>Code | Description  | Suggested Fix   |
|---------------|--|---|
| 01            | Function Code not supported  | Check instruction or connected device and correct Function code or address range selected.                                  |
| 02            | Address out of range. This error is typically generated when a Modbus address has been requested that does not exist in the CPU. | Check instruction or connected device and correct Function code or address range selected.                                  |
| 03            | Illegal Data Value. This error is typically generated when the Modbus request sent to the CPU is formed incorrectly.             | Check the Modbus request against the Modbus protocol specification (www.modbus.org) to verify that it was formed correctly. |
| 04            | Device Failure   | Check connected device  |

#### **Module Error Codes**

| Error<br>Code | Cause   | Solution  |
|---------------|---|---|
| E02101        | One or more module status bits are set.                                 | Examine the individual module status bits for the module(s) in question to determine the cause of the error and appropriate action.   |
| E02110        | Module firmware is incompatible with project.                           | Recompile and transfer project to CPU. If problem persists, upgrade module firmware to latest version, then recompile and transfer project using latest Programming Software.                                   |
| E02111        | Module firmware is incompatible with project.                           | Recompile and transfer project to CPU. If problem persists, upgrade module firmware to latest version, then recompile and transfer project using latest Programming Software.                                   |
| E02112        | Module configuration data is invalid.                                   | Recompile and transfer project to CPU. If problem persists, upgrade module firmware to latest version, then recompile and transfer project using latest Programming Software.                                   |
| E02113        | Module configuration data is invalid.                                   | Recompile and transfer project to CPU. If problem persists, upgrade module firmware to latest version, then recompile and transfer project using latest Programming Software.                                   |
| E02114        | Unable to configure module.   | Restart CPU. If problem persists, recompile and transfer project to CPU. If problem persists, upgrade module firmware to latest version, then recompile and transfer project using latest Programming Software. |
| E02115        | Unable to configure module.   | Restart CPU. If problem persists, recompile and transfer project to CPU. If problem persists, upgrade module firmware to latest version, then recompile and transfer project using latest Programming Software. |
| E02210        | Too many modules G000   | P1 CPU only supports 8 modules at a time. Remove power and remove all modules past the 8th module.  |
| E02301        | Expected module is not installed, or the installed module is defective. | Install the correct module.   |
| E02302        | Expected module is not installed, or the installed module is defective. | Install the correct module.   |

#### **CPU Error Codes**

| Error<br>Code | Cause                                       | Solution   |
|---------------|---|--|
| E05101        | The CPU battery is low.                     | Replace CPU's Battery.   |
| E05106        | I2C bus has locked up.                      | Self-recoverable. If problem persists, restart system.                               |
| E05120        | The module specified has a Firmware Error.  | Replace the unit. If unit is in warranty, call<br>AutomationDirect for an RA number. |
| E05121        | The module specified has a Hardware Error.  | Replace the unit. If unit is in warranty, call<br>AutomationDirect for an RA number. |
| E05122        | The module specified has an Internal Error. | Replace the unit. If unit is in warranty, call<br>AutomationDirect for an RA number. |

### **Project Error Codes**

| <b>Error Code</b> | Cause  | Solution   |
|-------------------|--|--|
| E03000 - E03199   | Internal firmware file system error.   | Power cycle CPU. If problem persists, contact AutomationDirect for repair or replacement.                            |
| E03201 - E03299   | Internal firmware operating system error.  | Power cycle CPU. If problem persists, contact AutomationDirect for repair or replacement.                            |
| E03301            | Unable to exit RUN mode.   | Power cycle CPU. If problem persists, contact AutomationDirect for repair or replacement.                            |
| E03801 - E03899   | Internal firmware USB error.   | Problem should self recover. If problem persists, power cycle CPU.   |
| E03901            | A scan exceeded the timeout specified in CPU Hardware Configuration.               | Verify that For/Next loops are handled properly. Adjust the timeout setting.   |
| E04101            | Scan attempted access beyond array limits. Txxxx is task ID. Rxxxx is rung number. | Correct problem in ladder logic or data that caused invalid access.  |
| E04201            | Internal firmware Data Logging error.  | Problem should self recover. If problem persists, power cycle CPU.   |
| E04202            | Cannot create data logging folder.   | Ensure a supported storage device is properly installed in USB OUT port on CPU. If problem persists, restart system. |
| E04203            | Cannot write data to data logging storage device.                                  | Ensure a supported storage device is properly installed in USB OUT port on CPU. If problem persists, restart system. |
| E04204            | Internal firmware Data Logging buffer is greater than 50% full.                    | Problem should self recover. If problem persists, power cycle CPU.   |
| E04205            | Internal firmware Data Logging buffer overflow.                                    | Problem should self recover. If problem persists, power cycle CPU.   |
| E04210            | Invalid system ID found while loading project.                                     | Load new project.  |
| E04220            | Email instruction failed.  | Problem should self recover. If problem persists, power cycle CPU.   |
| E04300 - E04302   | A project file is missing.   | Load new project.  |
| E04303            | Internal firmware project loader failure.  | Problem should self recover. If problem persists, power cycle CPU.   |
| E04304            | Project load failure limit exceeded.<br>Project has been removed.                  | Load new project.  |
| E04305 - E04306   | Internal firmware project loader failure.  | Problem should self recover. If problem persists, power cycle CPU. If problem persists, load new project.            |
| E04307            | Project file corrupt.  | Load new project.  |
| E04308 - E04315   | Internal firmware project loader failure.  | Load new project.  |

## **Project Error Codes - Continued**

| Error<br>Code | Cause  | Solution   |
|---------------|--|--|
| E04316        | Project upload failed.                               | Retry the process.   |
| E04317        | Internal firmware project loader failure.,           | Load new project.  |
| E04318        | Modbus TCP connection limit exceeded.                | Reduce the number of concurrently enabled MRX, MWX, RX and WX Instructions to no more than 64. |
| E04319        | Internal error.                                      | Self-recoverable, if problem persists restart CPU.   |
| E04320        | One or more RS232 parameters contain invalid values. | Verify that all RS232 parameters in project contain valid settings.                            |
| E04321        | One or more RS485 parameters contain invalid values. | Verify that all RS485 parameters in project contain valid settings.                            |

## **Project Error Messages**

| Error Message  | Cause   | Solution  |
|--|---|---|
| Cannot create a task with the name<br>' <taskname>' because a task with that<br/>name already exists.</taskname> | The name of the new task already exists.  | Create a unique task name.  |
| The help file ' <helpfilename>' cannot be found.</helpfilename>  | The help file cannot be found in the location that it was installed.  | Re-install the software. The ProductivitySuite Help file: P3-HELP.chm should be located in the following folder: C:\ ProgramFiles\AutomationDirect\ ProductivitySuite x.x.x.x\data\help |
| The topic ' <topicname>' does not exist.</topicname>   | A referenced help topic has either<br>been changed, moved, or deleted<br>from the help file.                    | Re-install the software or download the Latest Help File version.   |
| Task name cannot be empty.   | An attempt was made to create a task without a task name.   | Create a unique task name.  |
| The task name has an invalid character ' <taskname>'.</taskname>   | An attempt was made to create a task with an invalid character in the name.                                     | Create a unique task name using valid characters only.  |
| The task name ' <taskname>' already exists.</taskname>   | The name of the new task already exists.  | Create a unique task name.  |
| Tagname cannot be all digits.  | A tagname that consists of only digits was entered.   | There must be at least one letter in a tagname.   |
| Cannot complete the operation because the P1-540/550 folder already exists.                                      | The P1-540/550 folder already exists on the target removable USB drive and the create folder option is checked. | Uncheck the create folder option in the dialog and try transfer again.  |
| Cannot complete the operation because the P1-540/550 folder does not exist.                                      | The P1-540/550 folder does not exist on the target removable USB drive and the create option is not checked.    | Check the create folder option in the dialog and try transfer again.  |
| Cannot complete the operation due to failure to create the P1-540/550 folder.                                    | System could not create the P1-540/550 folder.  | This might be due to a read only drive.   |
| Failed to reboot CPU.  | CPU failed to reboot.   | Reboot CPU again or cycle power.  |
| Failed to get CPU date & time from CPU.  | CPU failed to return date & time data.  | Check CPU to PC connection.   |
| Failed to set CPU date & time.   | CPU failed to set date & time.  | Check CPU to PC connection.   |
| CPU does not exist.  | A CPU does not exist in the configuration.  | Add a CPU to the hardware configuration or connect to the CPU and select "read configuration" in the Hardware Configuration dialog.   |
| Rebooting the CPU failed.  | CPU failed to reboot.   | Reboot CPU again or Cycle power   |
| The IP address ' <ip address="">' is already on the network. Please use a different address.</ip>                | The new CPU IP address is used by another entity on the network.  | Select a unique IP address. You may need to contact your networks IT department to verify.  |
| Cannot change CPU name.  | Failed to change CPU name due to a CPU error or a network problem   | Check CPU to PC connection.   |

#### **Project Error Messages - Continued**

| Error Message   | Cause   | Solution   |
|---|---|--|
| Cannot change IP configuration due to CPU error.  | CPU failed to change IP configuration.                                      | Check CPU to PC connection and network configuration. Connections through a router may also cause conflicts. |
| Cannot change IP configuration due to network problem.  | CPU failed to respond to the IP configuration request.                      | Check CPU to PC connection and network configuration. Connections through a router may also case conflicts.  |
| Could not connect to the CPU.   | CPU is not able to be connected.  | Check CPU to PC connection.  |
| Could not disconnect the CPU.   | CPU is not able to be disconnected.   | Check CPU to PC connection.  |
| Could not connect to the selected CPU.  | Failed to validate security on connection.                                  | Check CPU to PC connection and required security passwords.  |
| Cannot blink CPU due to CPU error.  | CPU failed to blink CPU run light.  | Check CPU to PC connection and clear existing CPU errors.  |
| Cannot blink CPU due to network problem.  | CPU failed to respond to the blink request.                                 | Check CPU to PC connection and network configuration. Connections through a router may also cause conflicts. |
| Failed to retrieve I/O inventory from CPU ' <cpu name="">'.</cpu>                             | CPU failed to respond to the inventory request.                             | Check CPU to PC connection and request again.  |
| Failed to put the CPU to run mode.  | CPU is not able to be put in run mode.                                      | CPU mode switch must be in the Run position and errors cleared.  |
| Failed to put the CPU to stop mode.   | CPU is not able to be put in stop mode.                                     | Check CPU to PC connection.  |
| Failed to put the CPU to debug mode.  | CPU is not able to be put in debug mode.                                    | Check CPU to PC connection. CPU must be in STOP before entering debug mode.                                  |
| CPU has existing connection.  | CPU cannot be connected since it has already connected to another software. | Verify existing connections.   |
| Failed to put the CPU into <cpu<br>Mode&gt; mode because CPU<br/>connection is lost.</cpu<br> | CPU connection is lost while setting CPU mode.                              | Check CPU to PC connection.  |

### **Project Error Messages - Continued**

| Error Message  | Cause   | Solution   |
|--|---|--|
| Failed to put the CPU into <cpu mode=""> mode because CPU has existing critical error.</cpu>                                     | Cannot set CPU mode due to critical errors on the CPU.  | Check CPU to PC connection and clear errors.   |
| Failed to put the CPU into run mode because the CPU switch is set to the STOP position.  | Cannot set CPU to run mode since the run/stop switch is in the stop position.   | Place the CPU switch in Run.   |
| Could not connect to the detected CPU.   | An unknown failure occurred on connection.  | Check CPU to PC connection.  |
| You do not have permission to access this feature.   | The security setup does not allow the current user to perform this operation.   | Check CPU to PC connection and required security passwords.  |
| You need to specify a user name.   | The name on a user account was deleted while editing the profile.   | Specify the user name.   |
| You need to specify a password.  | The password on a user account was deleted while editing the profile.   | Specify the password.  |
| The two passwords do not match.  | The password on a user account was changed and the verification does not match the new value.   | Re-enter the password and check to make sure both are the same.  |
| At least one user needs to have<br>"Project Transfer From CPU and<br>Monitor Data" selected to enable the<br>protection feature. | Project Transfer from CPU and Data<br>Monitor security was enabled without<br>a user with these rights currently<br>defined.              | Define at least one user with the appropriate project transfer rights.   |
| At least one user needs to have<br>"Project Transfer To CPU" selected to<br>enable the protection feature.                       | Project Transfer to CPU security was enabled without a user with these rights currently defined.  | Define at least one user with the appropriate project transfer rights.   |
| You must connect to a CPU first.   | User tried to Set Factory Defaults,<br>Reboot the CPU, Read the SRAM,<br>or Clear CPU Memory without first<br>being connected to the CPU. | Check CPU to PC connection.  |
| The current project does not contain a CPU in the configuration. Go to: Setup>Hardware Config to correct the problem.            | The user tried to download a project that does not contain a CPU to the CPU or USB Pen Drive.   | Add a CPU to the hardware configuration or connect to the CPU and in the hardware configurations dialog select "read configuration". |
| The CPU firmware is in service mode. The requested action is not available in this mode.   | The user tried to transfer a project to a CPU that is in Service Mode.  | Check CPU to PC connection and upgrade firmware.   |
| Please select a search result first.   | In the Find dialog, User pressed the GoTo button before selecting an entry in the Search Results list.                                    | Define your search criteria and try again.   |
| Incorrect Key Code.  | User entered an invalid license keycode.  | Verify correct key code was entered. Pay close attention to capitalization, and mixture of letters and numbers.                      |