

# PRODUCTIVITY3000® ERROR CODES

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# APPENDIX B

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### Communications Error Codes

Error 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 ( <a href="http://www.modbus.org">www.modbus.org</a> ) to verify that it was formed correctly.
04	Device Failure	Check connected device

### Module Error Codes

Error 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.
E02201/ E02202	Intelligent module is not communicating.	Remove and reinstall the module. If the problem persists, the module is defective and must be repaired or replaced.
E02203	P3-EX is not communicating with CPU or P3-RS/P3-RX. Or, local base is not communicating with its CPU or P3-RS/P3-RX. Hot swap is enabled for the base.	Verify base has power. Disconnect and reconnect base communication cable. If problem persists, replace base communication cable, or P3-EX. If problem persists, cycle power to base. If problem persists, restart system.
E02204	P3-EX is not communicating with CPU or P3-RS/P3-RX. Or, local base is not communicating with its CPU or P3-RS/P3-RX. Hot swap is enabled for the base.	Verify base has power. Disconnect and reconnect base communication cable. If problem persists, replace base communication cable, or P3-EX. If problem persists, cycle power to base. If problem persists, restart system.
E02205	P3-RS/P3-RX is not communicating with CPU. Hot swap is enabled for the entire remote base group.	Verify that the P3-RS/RX is properly connected via Ethernet to the CPU "Remote I/O" port and that the P3-RS/RX is powered on. If problem persists, verify that Ethernet equipment, such as switches and cables are functioning properly.
E02206	P3-RS/P3-RX is not communicating with CPU. Hot swap is enabled for the entire remote base group.	Verify that the P3-RS/RX is properly connected via Ethernet to the CPU "Remote I/O" port and that the P3-RS/RX is powered on. If problem persists, verify that Ethernet equipment, such as switches and cables are functioning properly.

### Module Error Codes - Continued

Error Code	Cause	Solution
E02207	Multiple remote slaves are set to same group number.	Make sure that each slave module in the network is set to a unique group number.
E02208	An expansion base is connected to the USB OUT port on the CPU.	Move cable to EXP I/O OUT port.
E02209	More than four expansion bases have been connected to the CPU.	Disconnect additional expansion bases.
E02301	Expected module is not installed, or the installed module is defective. Hot swap is enabled for the slot.	Install the correct module.
E02302	Expected module is not installed, or the installed module is defective. Hot swap is not enabled for the slot.	Install the correct module.
E02401	GS-Drive configuration cannot be transferred to GS-Drive due to communications error.	Make sure GS-Drive is in STOP mode and motor is not in motion, then either power-cycle CPU or re-transfer project to CPU.
E02402	GS-Drive configuration cannot be transferred to GS-Drive due to GS-Drive error. Number in parentheses is MODBUS exception code.	Verify E-Drive and GS-Drive are properly installed and functioning, then either power-cycle CPU or re-transfer project to CPU.
E02403	GS-Drive configuration cannot be transferred to GS-Drive while motor is in motion.	Make sure GS-Drive is in STOP mode and motor is not in motion, verify all Ethernet equipment is properly installed and configured, then either power-cycle CPU or re-transfer project to CPU.
E02404	GS-Drive configuration cannot be transferred to GS-Drive because GS drive type and model do not match project.	Correct GS drive type and model in project.

### CPU Error Codes

Error Code	Cause	Solution
E05101	The CPU battery is low.	Replace CPU Battery.
E05102	The Base identifier (EPROM) is invalid.	Replace the unit. If unit is in warranty, call AutomationDirect for an RA number.
E05103	The P3-550(E) or P3-RS cannot communicate with the User Interface Module (LCD).	Replace the unit. If unit is in warranty, call AutomationDirect for an RA number.
E05104	Too many display messages were sent to the User Interface Module (LCD) in a short period of time.	Reduce the rate at which messages to the LCD are triggered.
E05105	The User Interface Module (LCD) did not receive firmware from the P3-550(E) or P3-RS.	If error persists after power cycle, replace the unit. If unit is in warranty, call AutomationDirect for an RA number.
E05106	I2C bus has locked up.	Self-recoverable. If problem persists, restart system.
E05107	UIM Task Can not access File System.	Restart system, if reoccurs notify support.
E05108	Missing or improperly formatted Pen Drive.	Insert valid Pen Drive (FAT16 or FAT32).
E05109	Error Reading or Writing to the Pen Drive.	Replace Pen Drive.
E05110	CPU has an existing Connection to Productivity Suite, UIM Action can not be performed.	Wait until CPU Connection is closed or restart system.
E05111	One or more project files are missing from Pen Drive.	Transfer complete project to Pen Drive.
E05120	The module specified has a Firmware Error.	Replace the unit. If unit is in warranty, call AutomationDirect for an RA number.
E05121	The module specified has a Hardware Error.	Replace the unit. If unit is in warranty, call AutomationDirect for an RA number.
E05122	The module specified has an Internal Error.	Replace the unit. If unit is in warranty, call AutomationDirect for an RA number.

## Project Error Codes

Error Code	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.
E04230	Base firmware may be corrupt.	Power cycle base. If problem persists, power cycle CPU or P3-RS/RX. If problem persists, reload firmware for the CPU or the P3-RS/RX in control of the Base Group.
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. 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.
E04316	Project upload failed.	Retry the process.
E04317	Internal firmware project loader failure.	Load new project.

**Project Error Codes - Continued**

<b>Error Code</b>	<b>Cause</b>	<b>Solution</b>
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 '<taskname>' because a task with that name already exists.	The name of the new task already exists.	Create a unique task name.
The help file '<helpfilename>' cannot be found.	The help file cannot be found in the location that it was installed.	Re-install the software. The P3-HELP.chm file should be located in the following folder: C:\ProgramFiles\AutomationDirect\ProductivitySuite\data\help
The topic '<topicname>' does not exist.	A referenced help topic has either been changed, moved, or deleted 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>'.	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.	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 P3-550(E) folder already exists.	The P3-550(E) 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 P3-550(E) folder does not exist.	The P3-550(E) 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 P3-550(E) folder.	System could not create the P3-550(E) 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.	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.	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 cause conflicts.
The project GS drive for address <GS Drive ID> has a type mismatch. The project configuration has a type of <GS Drive Model> while the physical configuration has a type of <GS Drive Model>. Please correct the project configuration before continuing.	The GS drive type in the software works CPUe is different from the physical configuration.	Check the Hardware Configuration or connect to the CPU and in the hardware configuration dialog select "Read Configuration".
The base found on group <CPU GroupId> base <CPU BaseId> is invalid.	The base ID returned from CPU is invalid.	Check the hardware configuration or connect to the CPU and in the hardware configurations dialog select "Read Configuration".
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 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 Mode> mode because CPU connection is lost.	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.	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 "Project Transfer From CPU and Monitor Data" selected to enable the protection feature.	Project Transfer from CPU and Data Monitor security was enabled without a user with these rights currently defined.	Define at least one user with the appropriate project transfer rights.
At least one user needs to have "Project Transfer To CPU" selected to 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, Reboot the CPU, Read the SRAM, or Clear CPU Memory without first 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.

Project Error Messages - Continued

Error Message	Cause	Solution
Cannot create CPU P3-530 with existing remote base groups or GS drives.	Project has been created using a P3-550(E) and remote base groups or GS drives and programmer is trying to modify the hardware configuration to a P3-530.	P3-530 does not support remote I/O or GS drives. Remove the remote I/O or GS drives from configuration and add the P3-530 or continue to use the P3-550(E).
The project I/O configuration has a CPU mismatch. The project configuration has "P3-550(E)" while the physical I/O has "P3-530". Any remote base groups and GS drives that are not compatible with the physical CPU will be deleted if the CPU is used. Do you want to replace the project configuration?	CPU in base that the programming software is online with is different from the CPU in hardware configuration.	Either replace the CPU in the base with the CPU configured in the hardware configuration or change the hardware configuration in the project.
Cannot add a remote base group for the CPU P3-530	The P3-530 does not support remote I/O.	Remove any remote I/O from hardware configuration.
Cannot add a GS drive for CPU P3-530.	The P3-530 does not support remote GS Drives.	Remove any remote GS Drives from hardware configuration.