

# CPU Modules

## P3-622 \$550.00

The P3-622 is a high-performance CPU with communications ports that support USB, Ethernet, and serial devices. The P3-622 also includes a 4-line x 10-character LCD local display and a USB programming port.

Each Productivity3000® system requires one CPU module to be mounted in the controller slot in the local base of the initial base system. The CPU stores and executes the user's program.

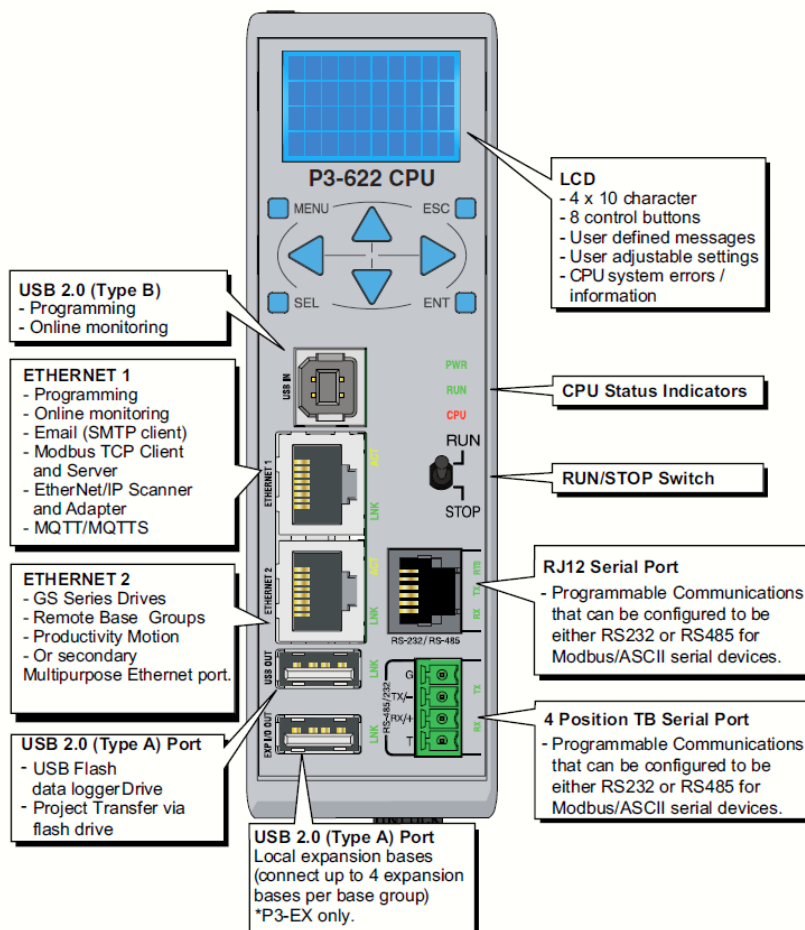
The system can be expanded with the P3-RX or P3-EX module when using a P3-622 CPU. The local, expansion, and remote I/O are assigned as preconfigured or user-defined tag names that can be easily referenced in the ladder logic program.



**NOTE:** A replacement LCD display is available for the P3-622 Order Part number [P3-LCD](#).

## P3-LCD \$83.00

### P3-622



CPU Status Indicators	
<b>PWR</b>	Green LED is illuminated when power is on
<b>RUN</b>	Green LED is illuminated when CPU is in RUN mode
<b>CPU</b>	Red LED is illuminated during power ON reset or power down.



CPU Run/Stop Switch	
<b>RUN position</b>	Executes user program, run-time edits possible
<b>STOP position</b>	Does not execute user program, normal program load position

# CPU Modules

## P3-550E \$750.00

The P3-550E is a high-performance CPU having multiple communication ports which support USB, Ethernet and serial devices. Designed with a 4-line x 10-character LCD and remote I/O capability.

Each Productivity3000® system requires one CPU module to be mounted in the controller slot in the initial base system of the local base group. The CPU stores and executes the user's program.

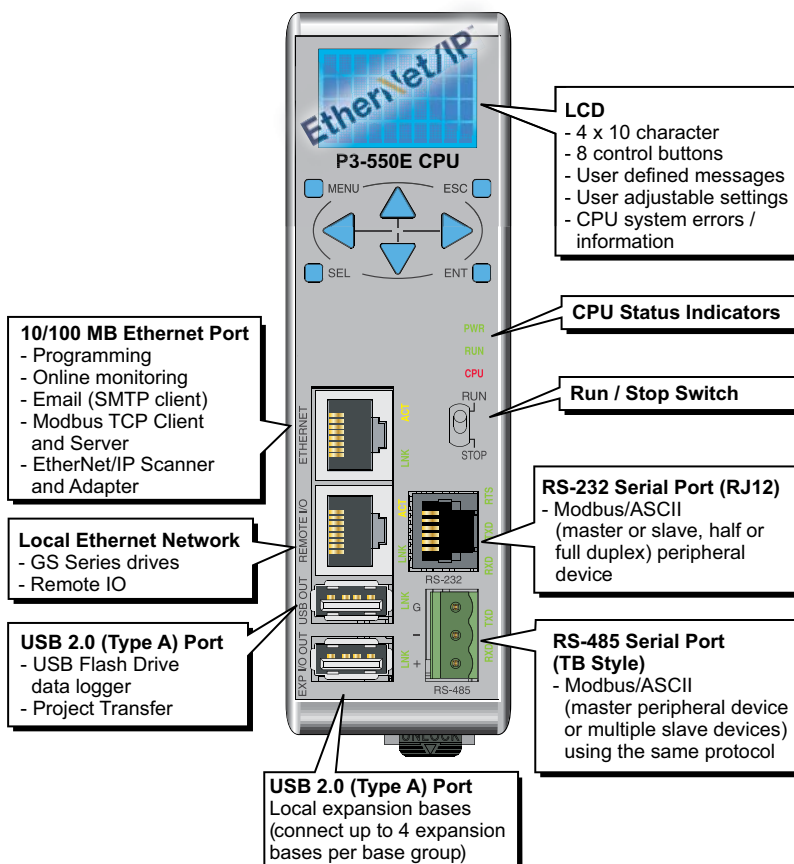
The system can be expanded with the P3-RX or P3-EX module when using the P3-550E CPU. The local, expansion, and remote I/O are assigned as preconfigured or user-defined tag names that can be easily referenced in the ladder logic program.



**NOTE:** A replacement LCD display is available for the P3-550E. Order Part number [P3-LCD](#).

## P3-LCD \$83.00

### P3-550E



CPU Status Indicators	
<b>PWR</b>	Green LED is illuminated when power is on
<b>RUN</b>	Green LED is illuminated when CPU is in RUN mode
<b>CPU</b>	Red LED is illuminated during power on reset, power down, or watch-dog time-out.



CPU Run/Stop Switch	
<b>RUN position</b>	Executes user program, run-time edits possible
<b>STOP position</b>	Does not execute user program, normal program load position

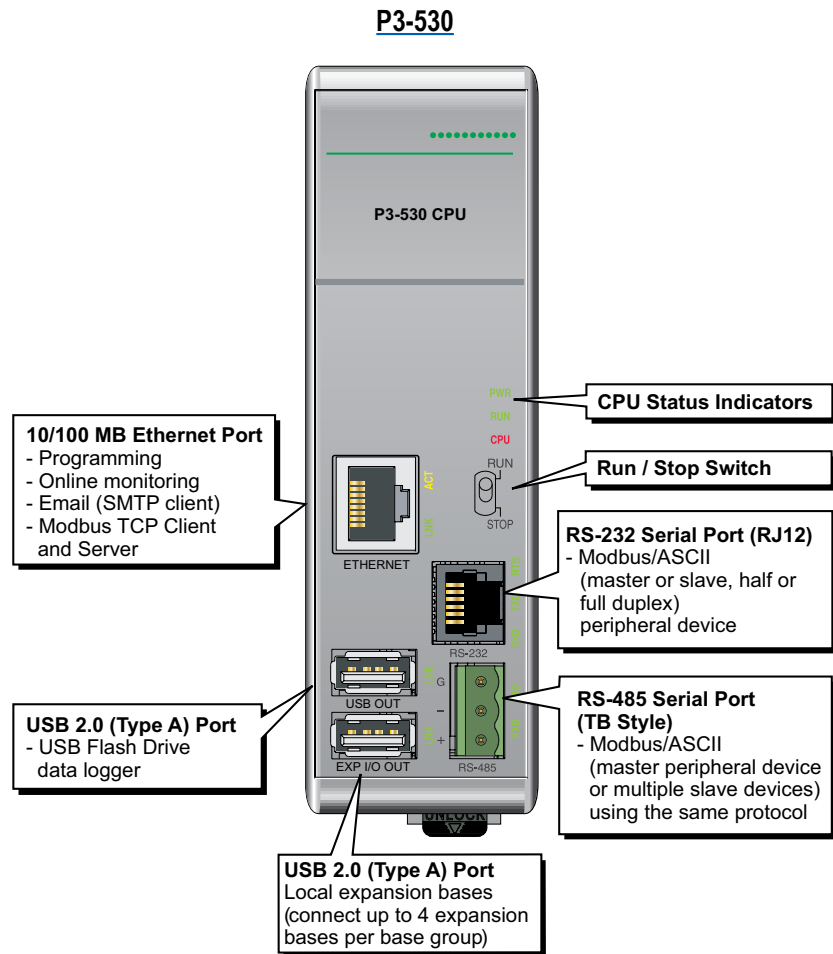
# CPU Modules

## P3-530 \$735.00

The P3-LCD Basic is a high-performance CPU. Several communications ports support Ethernet and serial devices.

Each Productivity3000<sup>®</sup> system requires one CPU module mounted in the controller slot in the first base of the local base group. The CPU stores and executes the user's program.

The system can be expanded with the P3-EX module when using the P3-530 CPU. The local I/O are assigned preconfigured or user-defined tag names which can be easily referenced in the ladder logic program.



CPU Status Indicators	
<b>PWR</b>	Green LED is illuminated when power is on
<b>RUN</b>	Green LED is illuminated when CPU is in RUN mode
<b>CPU</b>	Red LED is illuminated during power on reset, power down, or watch-dog time-out.



CPU Run/Stop Switch	
<b>RUN position</b>	Executes user program, run-time edits possible
<b>STOP position</b>	Does not execute user program, normal program load position

# CPU Modules

## Specifications (see notes below)

CPU Specifications	P3-622	P3-550E	P3-530
User Memory	50MB (Includes program, data and documentation)		25MB (Includes program, data and documentation)
Memory Type	Flash and battery backed RAM		
Retentive Memory	492K		
Scan Time	2.4ms (3K Boolean, 1K I/O)	600µs (3K Boolean, 1K I/O)	
Display	LCD, 4x10 characters, backlit, 8 control buttons		N/A
Communications	ETHERNET1: (10/100 Mbps Ethernet) Programming, Monitoring, Debug, Firmware, Email SMTP Client, MQTT/MQTTs, Modbus TCP Client (32 slaves) and Server (32 masters), EtherNet/IP Scanner (128 Scanner connections) and Adapter (16 connections)	ETHERNET: (10/100 Mbps Ethernet) Programming, Monitoring, Debug, Firmware, Email SMTP Client, Modbus TCP Client (32 slaves) and Server (32 masters), EtherNet/IP Scanner (128 Scanner connections) and Adapter (16 connections)	ETHERNET: (10/100 Mbps Ethernet) Programming, Monitoring, Debug, Firmware, Email SMTP Client, Modbus TCP Client (32 slaves) and Server (32 masters)
	ETHERNET2*: (10/100 Mbps Ethernet) 32 GS Drives, 16 Remote Base Groups, 4 ProtosX TCP Couplers, 4 PS-AMC modules.	REMOTE I/O: (10/100 Mbps Ethernet) 16 RX Remote Base Groups, and 32 GS EDRV100 (GS Drives)	N/A
	USB OUT: (2.0) Data Logging and Project Transfer using pen drive (USB-FLASH recommended)		USB OUT: (2.0) Data Logging using pen drive (USB-FLASH recommended)
	USB IN: Programming, Monitoring, Debug, Firmware	N/A	
	EXP I/O OUT: (2.0 Proprietary) 4 P3-EX Local expansion bases		
	RJ12: RS-232/485 Programmable	RS-232: (RJ12, 1200–115.2k baud) Modbus RTU, ASCII full or half duplex	
	TB (4-pin): RS485/232 programmable removable terminal block	RS-485: Removable terminal block included, (1200–115.2k baud) ASCII, Modbus	
Hardware Limits of System	17 Base Groups 1 Local (P3-622) +16 Remote (P3-RS / P3-RX) 5 Bases per Base Group 1 P3-622, P3-RS or P3-RX + 4 Expansion (P3-EX) 85 Bases Total 1 (CPU) + 16 (Remote) + 68 (Expansion) 59,840 Hardware I/O Points (All 64-point I/O Modules) 32 GS Series Drives as Remote I/O	17 Base Groups 1 Local P3-550E + 16 Remote (P3-RX) 5 Bases per Base Group 1 P3-550E or P3-RX + 4 Expansion (P3-EX) 85 Bases Total 1 (CPU) + 16 (Remote) + 68 (Expansion) 59,840 Hardware I/O Points (All 64-point I/O Modules) 32 GS Series Drives as Remote I/O	5 Bases Total 1 P3-530 + 4 Expansion (P3-EX) 3,520 Hardware I/O Points (All 64-point I/O Modules)
Instruction Types	Application Functions Array Functions Counters/Timers Communications	Data Handling Drum Sequencers Math Functions PID	Program Control Coils String Functions High Speed I/O System Functions Motion Control (Except P3-530) Contacts
Real Time Clock Accuracy	±1s per day typical at 25°C ambient ±2s per day maximum at 60°C ambient	±5s per day typical at 25°C ambient: 1sec/day** ±15s per day maximum at 60°C ambient: 2sec/day**	±5s per day typical at 25°C ±15s per day maximum at 60°C

\* The 'ETHERNET 2' port can be configured as 'Default (Remote I/O)' or 'User Defined'. If 'User Defined' is selected this port will have the same specification as the 'ETHERNET1' port with the exception that this port does not have Default Gateway or DNS capability.

\*\* Revision B and higher.

## IMPORTANT!



### Hot-Swapping Information

**Note: This device cannot be Hot Swapped.**



#### NOTES:

- For EtherNet/IP support in the P3-550E CPU, use ProductivitySuite software version 2.2.0.XX or later.

# CPU Modules

General Specifications			
Parameter	P3-622	P3-550E	P3-530
Operating Temperature	0°C– 60°C (32°F–140°F)		
Storage Temperature	-20°C–70°C (-4°F–158°F)		
Humidity	5 to 95% (non-condensing)		
Altitude	2,000 meters max.		
Pollution Degree	2		
Environmental Air	No corrosive gases permitted		
Vibration	IEC60068-2-6 (Test Fc)		
Shock	IEC60068-2-27 (Test Ea)		
Heat Dissipation	2297mW		7W
Overvoltage Category	II		
Enclosure Type	Open equipment		
Module Location	Controller slot in the local base in a Productivity3000 system		
Weight	235g (8.28 oz)	260 (9oz)	260g (9oz)
Agency Approvals	UL61010 and UL 61010-2-201 file E139594, Canada & USA CE (EN61131-2 EMC, EN 61010-1 and EN 61010-2-201 Safety)* UL508 file E157382, Canada & USA UL1604 file E200031, Canada & USA CE (EN61131-2)* This equipment is suitable for use in Class 1, Division 2, Groups A, B, C and D or non-hazardous locations only.		

\*Meets EMC and Safety requirements. See the Declaration of Conformity for details.



**NOTE:** When using the P3-550E CPU, use Productivity Suite software version 2.2.0.XX or later.

**NOTE:** P3-622 requires ProductivitySuite software version 4.4.0.x or later.

P3000 CPU Modules Comparison			
CPU	P3-622	P3-550E	P3-530
LCD Display			
USB Prog/Mon Port			
Ethernet Port			
EtherNet/IP Protocol			
Remote Expansion Port			
USB Memory Stick Port			
USB Local Expansion Port			
RS-232 RJ12 Port			
RS-485 Port			
User Memory	50MB	50 MB	25 MB

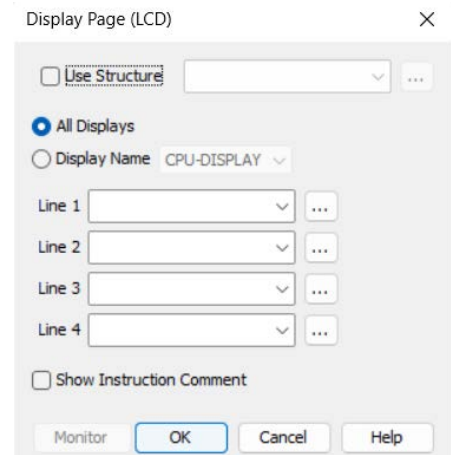
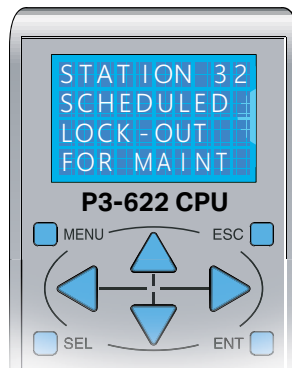
# CPU Modules

## LCD Message Display

Both the P3-622 and P3-550E CPU incorporate a 4-line x 10-character LCD Display for system alarms and information or for displaying user-defined messages.

LCD control buttons located beneath the display allow the user to navigate through a menu, and arrow buttons allow for configuration of time and date settings.

For user-defined messages, the display is configured using the Productivity Suite Programming Software. An LCD Page instruction allows the user to program text into user-defined tags and display the messages based on the ladder execution.



## CPU Installation

### Step One:

Locate the two sockets next to the power supply; the CPU will be inserted into this location.



### Step Two:

Insert the CPU at a 45° angle into the notch located at the top of the base and rotate down until seated.



### Step Three:

Snap retaining tab into the locked position.



**WARNING!!:** EXPLOSION HAZARD – DO NOT CONNECT OR DISCONNECT CONNECTORS OR OPERATE SWITCHES WHILE CIRCUIT IS LIVE UNLESS THE AREA IS KNOWN TO BE NON-HAZARDOUS. DO NOT HOT SWAP.

## Battery (Optional)

A battery is included with some CPUs, but is not installed. The battery can be installed to retain the Time and Date along with any Tagname values that are set up as retentive.

The battery is not needed for program backup.

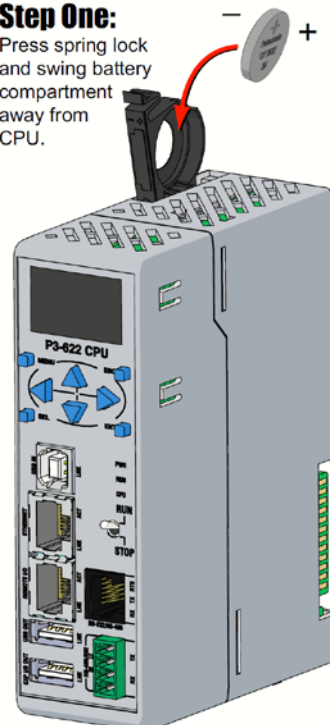
### Battery (Optional)

**D2-BAT-1**

Coin type, 3.0V Lithium battery, 560mA  
battery number CR2354

### Step One:

Press spring lock and swing battery compartment away from CPU.



### Step Two:

Insert battery and close compartment.

