P1-01AC
Productivity1000

100-240V ≈ 48VA
50-60Hz
125VDC, 20W

AC (L)
DC (+V)
AC (N)
DC (-V)
G
LG

P1-540
Productivity1000

RUN   PWR
        RUN
STOP   CPU

USB   LINK
       PGM

μSD

RS-485 T RX
        +
        - TX
        G

RS-232 RTS TX RX

ETHERNET   LINK
            ACT

P1-15CDD1
C1
1
2
3
4
5
6
7
8
C2
1
2
3
4
5
6
7
V+

INPUTS

OUTPUTS

12-24VDC IN
3.3-24V OUT

P1-15CDD2
C1
1
2
3
4
5
6
7
8
V+
1
2
3
4
5
6
7
C2

INPUTS

OUTPUTS

12-24VDC
INPUT/OUTPUT

P1-04ADL-1
24V
I1+
I2+
I3+
I4+
0V
COM
COM
COM
COM

0-20mA INPUT
ANALOG

P1-04ADL-2
24V
V1+
V2+
V3+
V4+
0V
COM
COM
COM
COM

0-10VDC INPUT
ANALOG

P1-0

THERM
IN

Productivity®1000

11_17

Need a compact PLC with powerful features?

The Productivity1000 series PLC is the super compact yet highly capable member of our Productivity controller family. Packed with many of the features you love about the Productivity series but housed in a smaller, slimmer design and with a CPU price of $169, the Productivity1000 PLC will deliver the time, space, and budget savings your project needs.

Data Logging:
The Productivity1000 allows for up to 32GB of historical data to be saved to a removable micro SD card (sold separately).
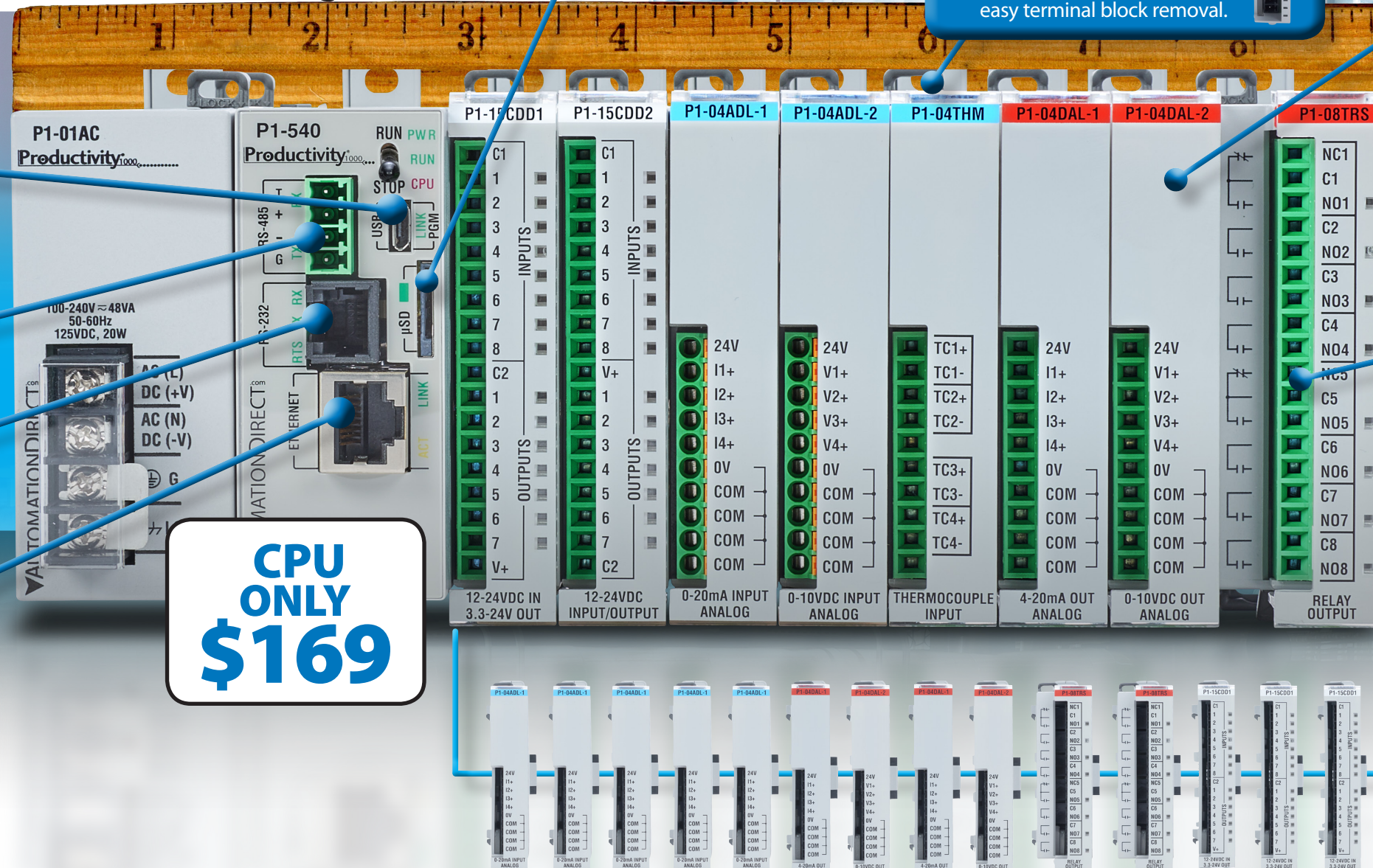
micro SD

Built-in Accessibility:
- The single top-side latch on every I/O module provides free and clear access to the latching mechanism when adding/removing I/O modules.
- The pivoting wire cover on each I/O module displays the wire label in any position so it's visible at all times.
- A fulcrum lever is designed into every I/O module for easy terminal block removal.

Slim Stackable Design:
The super slim form factor requires minimal panel space (approximately 8.9" for a fully-expanded 8 module system) and the stackable design allows for simple I/O expansion.

Built-in Communication:
The Productivity1000 comes with 4 built-in communication ports for easy connectivity to your PC or various industrial networks.

Micro USB
MicroB USB port for easy plug-and-play programming

Serial RS-485
4-pin serial Modbus RTU/ASCII or custom protocol connection

Serial RS-232
RJ12 serial Modbus RTU/ASCII or custom protocol connection

Ethernet 10/100Mbps
RJ45 Ethernet port for PLC programming and/or Modbus TCP, EtherNet/IP, custom UDP/TCP connections

Productivity 1000

P1-01AC Productivity1000
P1-540 Productivity1000

RUN PWR
RUN
STOP CPU
LINK PGM

100-240V ≈ 48VA
50-60Hz
125VDC, 20W

AC (L) DC (+V)
AC (N) DC (-V)
G

CPU ONLY $169

| P1-15CDD1 | P1-15CDD2 | P1-04ADL-1 | P1-04ADL-2 | P1-04THM | P1-04DAL-1 | P1-04DAL-2 | P1-08TRS |

12-24VDC IN 3.3-24V OUT | 12-24VDC INPUT/OUTPUT | 0-20mA INPUT ANALOG | 0-10VDC INPUT ANALOG | THERMOCOUPLE INPUT | 4-20mA OUT ANALOG | 0-10VDC OUT ANALOG | RELAY OUTPUT

Multiple Wiring Options:
Choose from spring clamp, screw terminal or the popular ZipLink wiring solution for your I/O wiring needs.

Spring Clamp

Screw Terminal

ZIPLINK
AUTOMATIONDIRECT

Modbus®
ASCII
EtherNet/IP

I/O EXPANSION MODULES STARTING AT $33.50
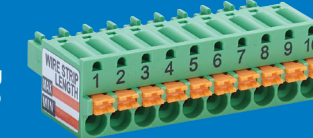
I/O Expansion:
You can add up to 8 I/O modules to the Productivity1000 PLC for a total of 128 discrete I/O points or 32 analog I/O channels. Several I/O modules are available to choose from:
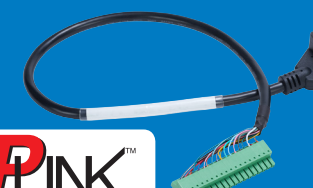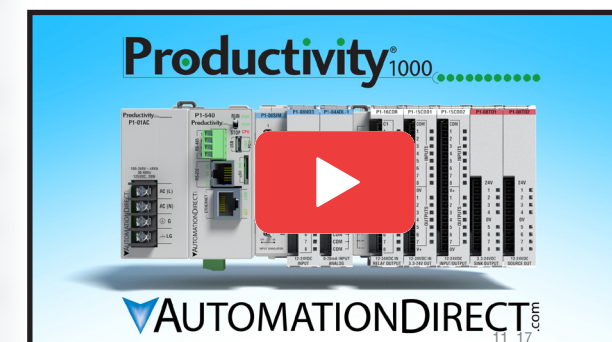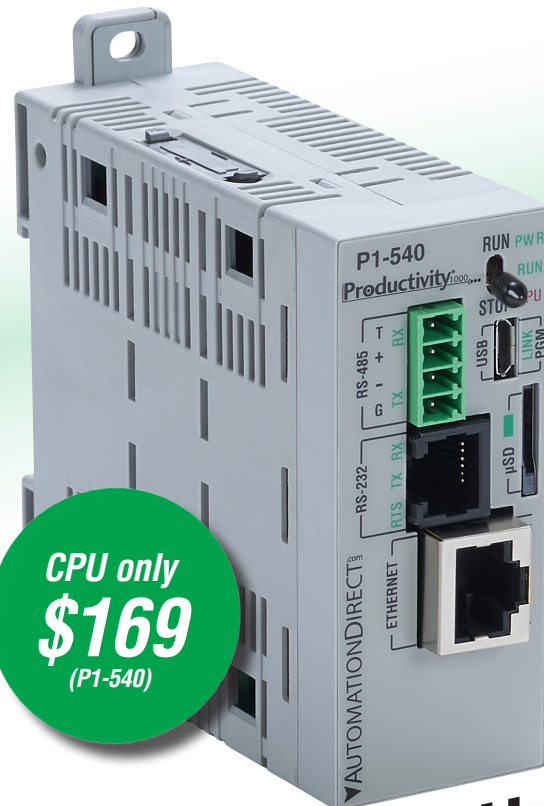- Discrete
- Analog
- Temperature
- Relay

Overview Video:
See what the Productivity1000 PLC has to offer!

Productivity1000
AUTOMATIONDIRECT

2 YEAR WARRANTY
30-day Money-Back Guarantee
30 day
FREE Technical Support — Located in USA

Reliable, affordable, super-compact hardware

The Productivity1000 series PLCs hardware is built to last and designed for applications where panel real estate is a concern. With various low-cost expansion I/O modules to choose from and a feature-rich CPU all backed with a 2-year warranty and a 30-day money-back guarantee, you'll never pay for overpriced hardware again!

Starting at $67 (P1-04ADL-1)

ANALOG I/O

CPU only $169 (P1-540)

Starting at $33.50 (P1-08ND3)

DISCRETE I/O

CPU

Starting at $43.50 (P1-08TRS)

RELAY I/O

Discrete I/O Modules

Discrete input, output and combo input/output modules are available in 8 or 16-point versions with various DC/AC voltage ranges.

- P1-08ND3 - Input Module 8-pt, 12-24 VDC
- P1-08TD1 - Output Module 8-pt, 3.3-24 VDC
- P1-08TD2 - Output Module 8-pt, 12-24 VDC
- P1-15CDD1 - Combo Module 8-pt, 12-24 VDC in, 7-pt 3.3-24 VDC out
- P1-15CDD2 - Combo Module 8-pt, 12-24 VDC in, 7-pt 12-24 VDC out

Relay I/O Modules

Relay output modules support devices that operate with voltages up to 240VAC or 24VDC.

- P1-08TRS - Output Module 8-pt, 6-24 VDC/6-120 VAC, 3A/pt
- P1-16TR - Output Module 16-pt, 6-24 VDC/6-240 VAC, 2A/pt
- P1-16CDR - Combo Module 8-pt discrete 24 VAC/VDC in, 8-pt 6-24 VDC/6-240 VAC relay out, 1A/pt

Analog/Temperature I/O Modules

Analog input and output modules are available to monitor and control pressure, temperature, flow, level or any other process signal your application requires.

- P1-04ADL-1 - Input Module 4-channel, 0-20 mA, 13-bit resolution
- P1-04ADL-2 - Input Module 4-channel, 0-10 VDC, 13-bit resolution
- P1-04DAL-1 - Output Module 4-channel, 4-20 mA, 12-bit resolution
- P1-04DAL-2 - Output Module 4-channel, 0-10 VDC, 12-bit resolution
- P1-04THM - Thermocouple Input Module 4-channel, 16-bit resolution
- P1-04NTC - Thermistor Input Module 4-channel, 16-bit resolution

Full-featured CPU

With 50MB of user memory, four built-in communication ports, data logging and tag name programming, this CPU offers big features in a small package.

- Plug-and-play USB programming (uses standard A-micro B cable)
- Tag database and program documentation storage in CPU (program pre-loaded on PC not necessary)
- Supports four built-in communications ports simultaneously
- High-speed Ethernet port for HMI and peer-to-peer or business system networking (no Ethernet communications module needed)
- Support for EtherNet/IP devices
- Two serial ports for peripheral device interface or controller networking
- Micro SD data logging right from the CPU

2 YEAR WARRANTY

30-day Money-Back Guarantee 30 day

SAVE ENERGY, SAVE MONEY
Productivity1000's low power usage - about the same as a 20W light bulb - will cut your energy costs for even more savings!
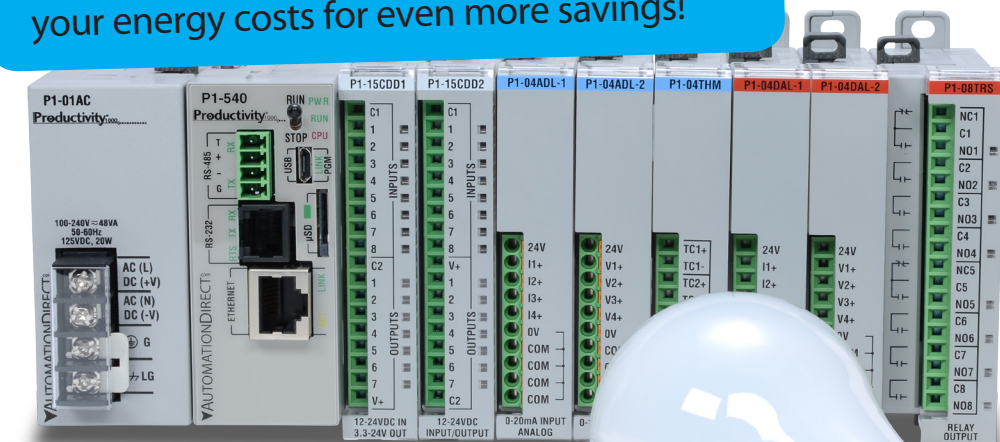
Productivity made easy

There are many features integrated into the Productivity1000 series PLCs and tools on our webstore that provide unmatched ease of use when selecting, expanding, configuring and wiring your hardware.
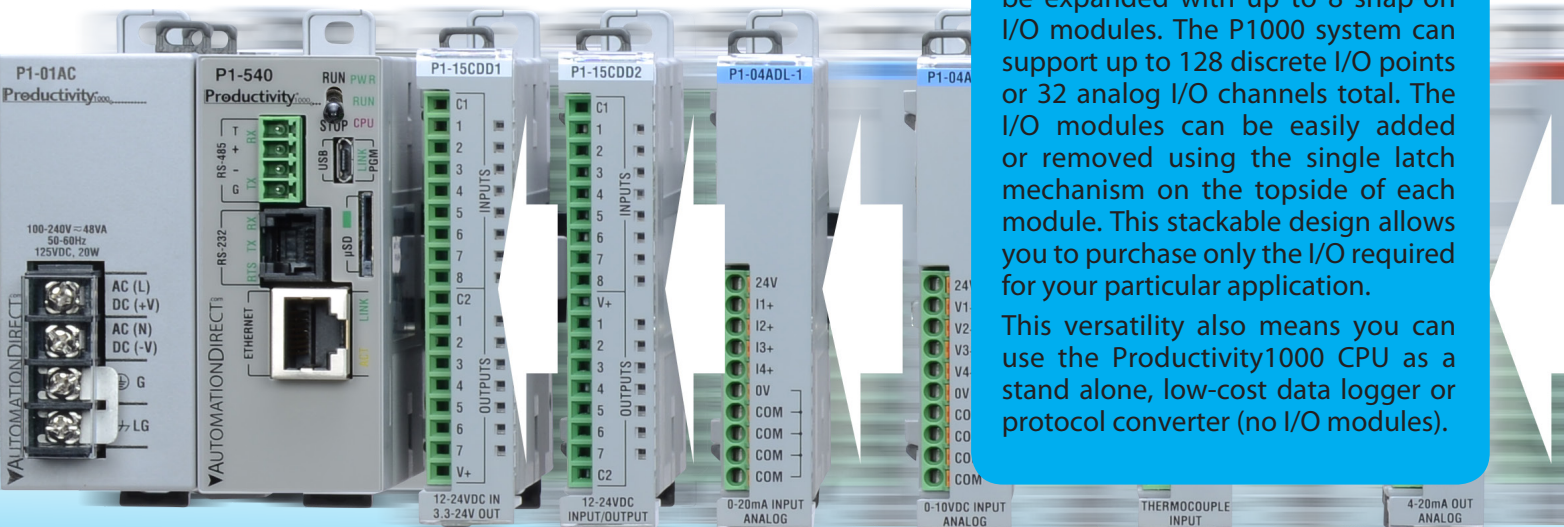
Expand with ease

The Productivity1000 requires no base or backplane and can easily be expanded with up to 8 snap-on I/O modules. The P1000 system can support up to 128 discrete I/O points or 32 analog I/O channels total. The I/O modules can be easily added or removed using the single latch mechanism on the topside of each module. This stackable design allows you to purchase only the I/O required for your particular application.

This versatility also means you can use the Productivity1000 CPU as a stand alone, low-cost data logger or protocol converter (no I/O modules).
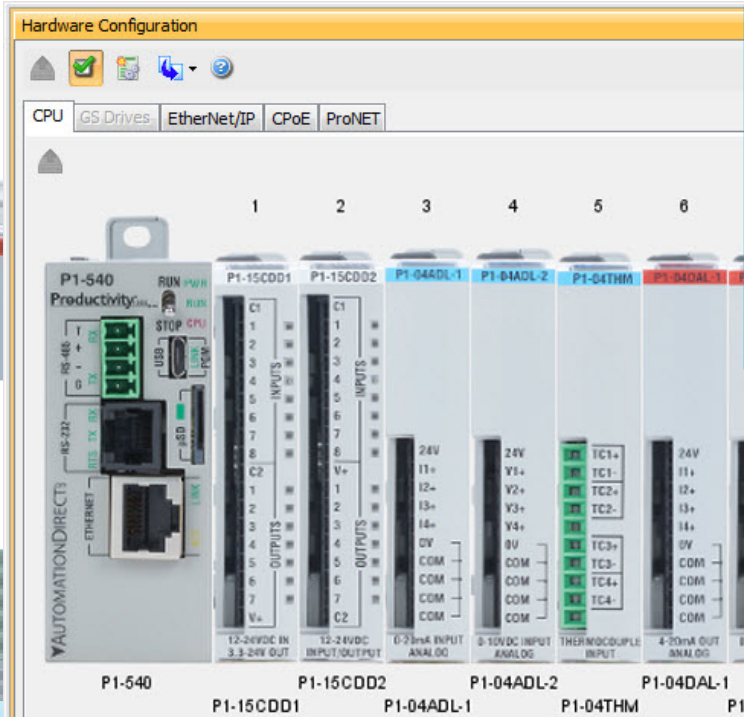
Get started in seconds with auto-discovered I/O modules

Once an I/O module is installed, the P1000 will automatically discover the module and create a realistic picture of your configuration in the free Productivity Suite software. Physical I/O tags will be generated based on each module's position in the base and that's it! You are ready to program with the auto-configured settings just seconds after power-up, or you can reconfigure the setup and assign new tags manually.
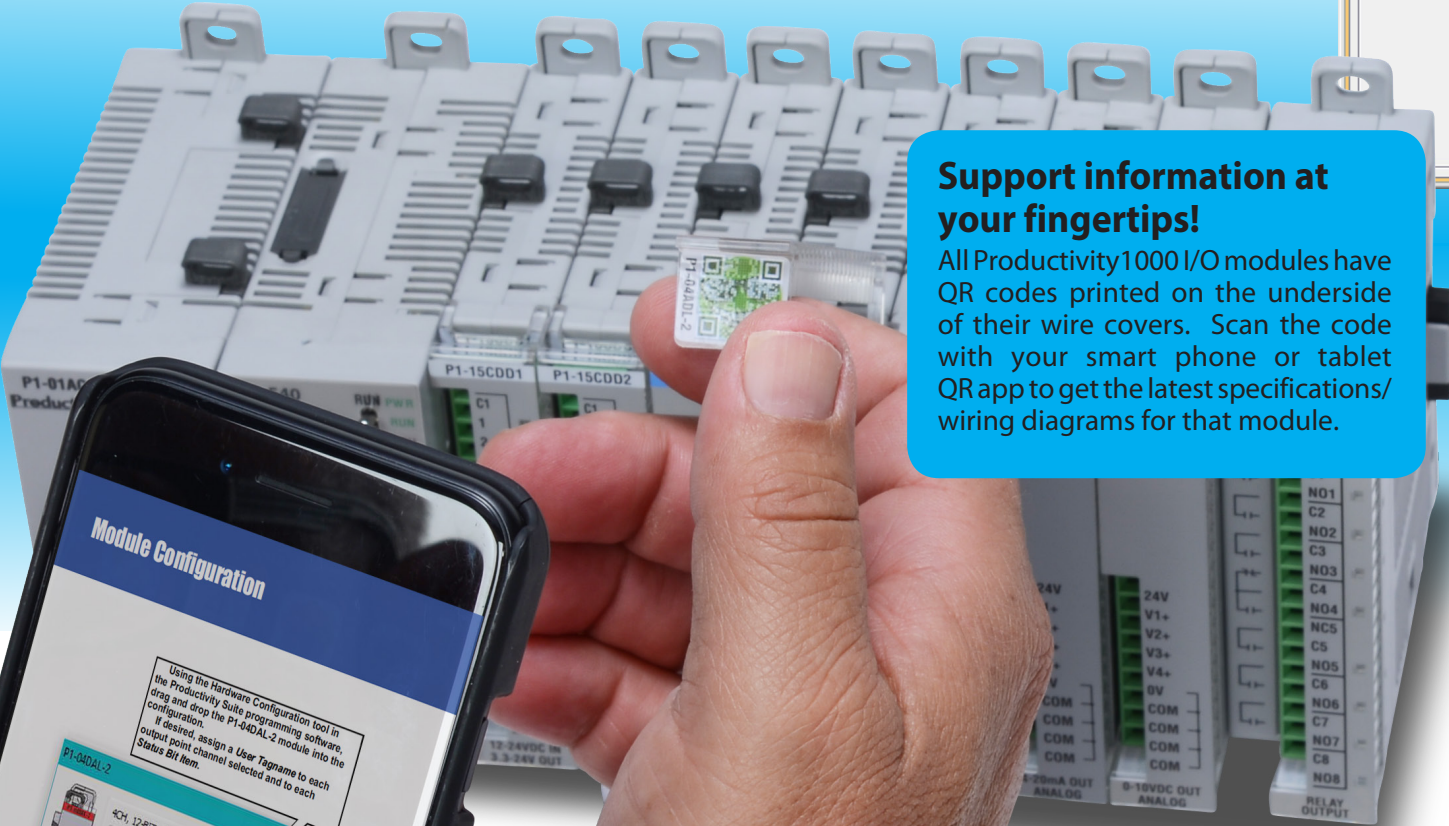
Support information at your fingertips!

All Productivity1000 I/O modules have QR codes printed on the underside of their wire covers. Scan the code with your smart phone or tablet QR app to get the latest specifications/wiring diagrams for that module.

Interactive PLC Configurator Tool

Use the interactive PLC configurator tool on our webstore to quickly configure your Productivity1000 system to your specifications. Simply choose the CPU and I/O modules you require with the connection options you prefer and send the selected parts right to the shopping cart.

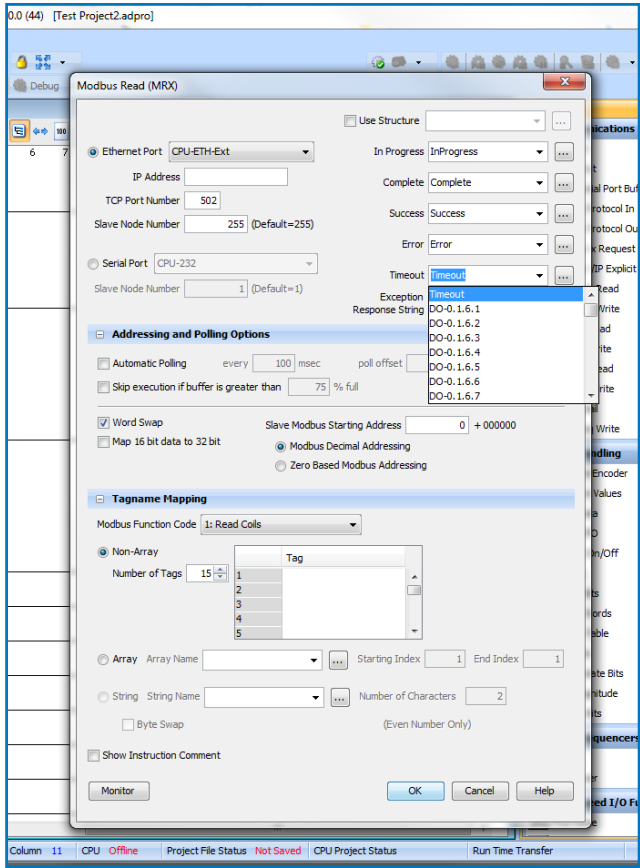See how easy it is at:

Click here to go now!
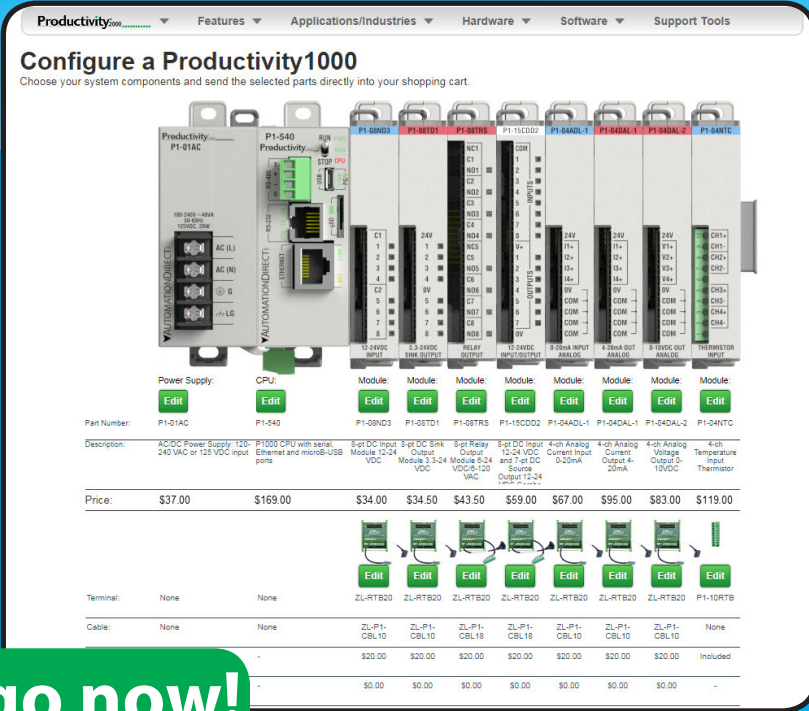
Fast Programming with FREE software

FREE Software

Developed inhouse with customer feedback

Productivity Suite is our free programing software for the Productivity family of controllers. Our own software engineers developed this programming package at our headquarters near Atlanta, Ga. It was designed with input from our technical service team who communicate on a daily basis with our customers. As a result, Productivity Suite not only meets but exceeds the needs of our customers, and provides a quick, user-friendly way to efficiently program the Productivity family of PLCs.

Program your way! Tag name based control that's powerful and easy to use

With Productivity Suite you have the freedom to define user tags with no limits or fixed boundaries. Configure timers, counters, integer words or any other data types you need. With tag name based programming, there are no pre-defined, fixed memory maps and no wasted, unused memory allocations.

Tag name based control also offers the ability to descriptively identify the control elements in your program. Older, fixed memory controllers force the use of pre-defined nomenclature for the data types. Which would you rather see when troubleshooting: T4:01 or Oven1 Purge Timer.Pre? The tag name helps identify the element as a numeric value for the oven purge timer's preset, making its purpose immediately clear.

FREE SOFTWARE

FREE Software!
Download as often as you need.
No license or key needed.
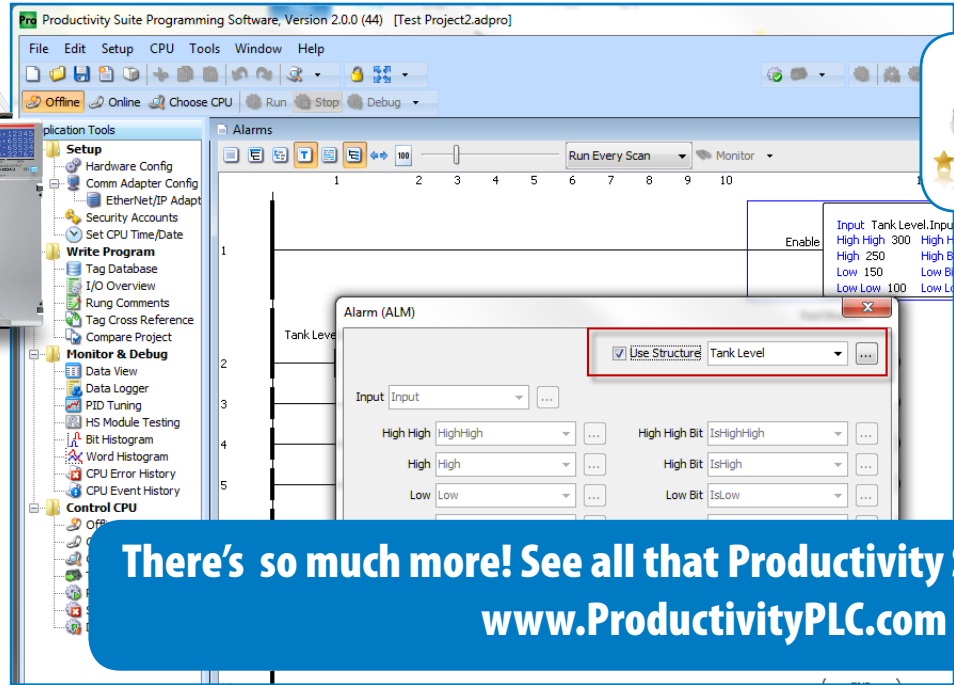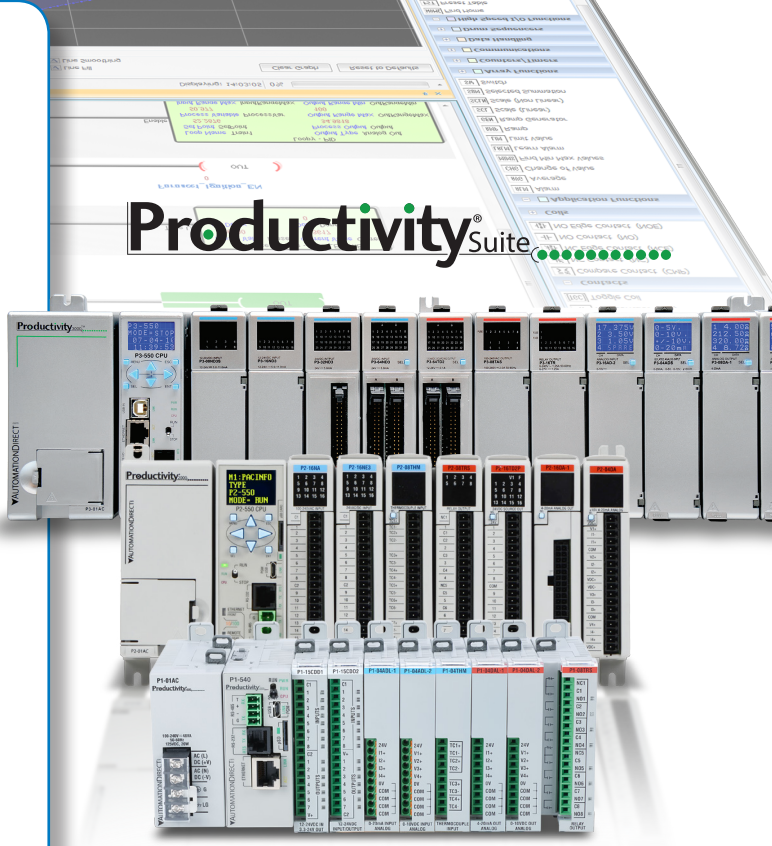**Click here to download.**

Productivity®Suite

Convenient fill-in-the-blank style function blocks

Math, PID, array, communication, data handling, high speed and application function blocks are available and easily configured with user-friendly selections.

Tag I/O reassignment saves you time, and time is money

Start programming now! Tag I/O reassignment allows you the freedom to develop your code now and assign your I/O later. Create your user tags offline and swap them out for the default tags once the hardware is available.
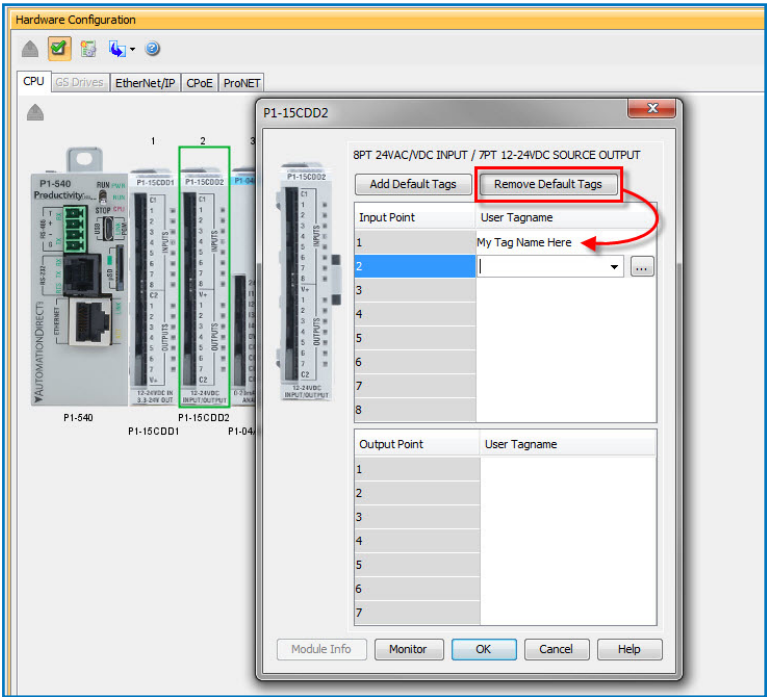
Pre-defined structures make programming automatic

Take the work out of tag creation. With instructions requiring multiple tags, Productivity Suite offers pre-configured tag structures. Simply give the instruction a common tag name and the defined suffixes will be added automatically.

> "Unbelievable performance and ease of use. Tag based addressing is wonderful..."
>
> **Matt in SPRINGFIELD, MO**

There's so much more! See all that Productivity Suite has to offer at:
www.ProductivityPLC.com

For the latest prices, please check AutomationDirect.com.   For the latest prices, please check AutomationDirect.com.

vAUTOMATIONDIRECT

BIG PLC features in a small package for a tiny price!

The Productivity1000 series PLCs are designed with features you'd expect to pay a whole lot more for. Built-in data logging, tag name programming, limitless PID, web server and mobile access, plus many other advanced features are packed into this budget and space-saving PLC series.

Up to 32GB of data!

micro SD

Built-in Data Logging

Track up to 64 tags at a time and save the data to the removable micro SD card stored in the CPU. Capture up to 32GB of data either periodically (minute, hour, day, week, etc.) or when certain events occur. Scheduling and setup is done with the easy-to-use Data Logger configuration tool in the software. Log tag data, system errors and system events which can be used to track efficiency and performance, troubleshoot recurring or intermittent faults, and predict future breakdowns.
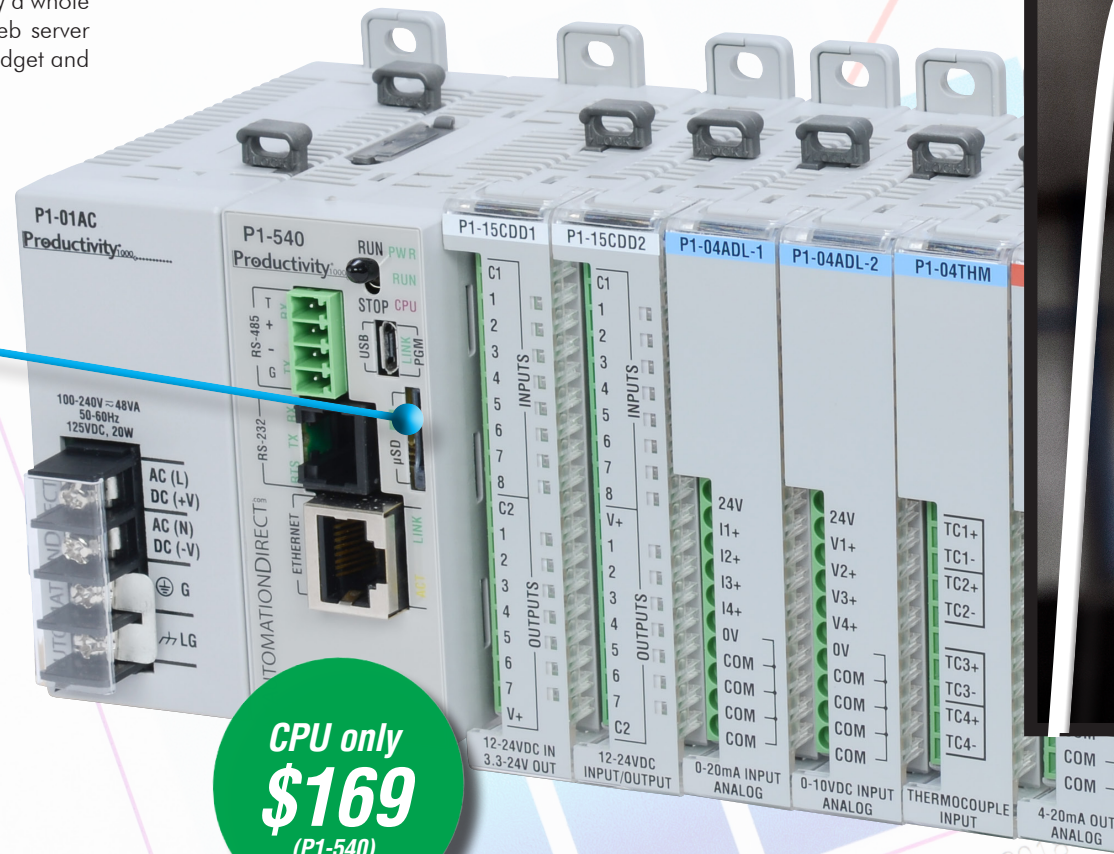
CPU only $169 (P1-540)

No-Limit PID

With 50MB of user memory, you have practically limitless PID functionality. The integrated PID function blocks make it easier to configure and control the process loops in your application.

The PID Monitor utility allows you to monitor your loops and tune them in real time. We also offer a built-in Auto-tuning algorithm (Ziegler-Nichols) to help give you a jump on fine tuning your loops.

The PID instruction supports either individual or cascade mode operation. It also includes a tab for configuring all of your process alarms, including Low-Low, Low, High, High-High Limits and Deviation Alarms.

Web Server

With the P1000 CPU's integrated Web Server, you can access Data Logger files stored on an installed flash device (optional) as well as monitor system status via the (read-only) System Tags.

Apple iOS PACDATA app

The FREE PAC/PLC Data Remote Monitor App allows you to connect to remote P1000 systems from a Wi-Fi or cellular network connection. The Remote user can monitor the local PLC system and user tags configured for remote access inside the tag database of the controller.

Timesaving Tag Names!

Export your tag name database from the Productivity1000 and import it into C-more software to jump start your HMI development. No more digging through your notes, or hunting through your ladder logic to find the right tag name.

Connect up to 16 C-more HMIs to the Productivity1000 via Ethernet for control and visibility of your process/machine from anywhere in your factory.

For the latest prices, please check AutomationDirect.com.   For the latest prices, please check AutomationDirect.com.

AUTOMATIONDIRECT
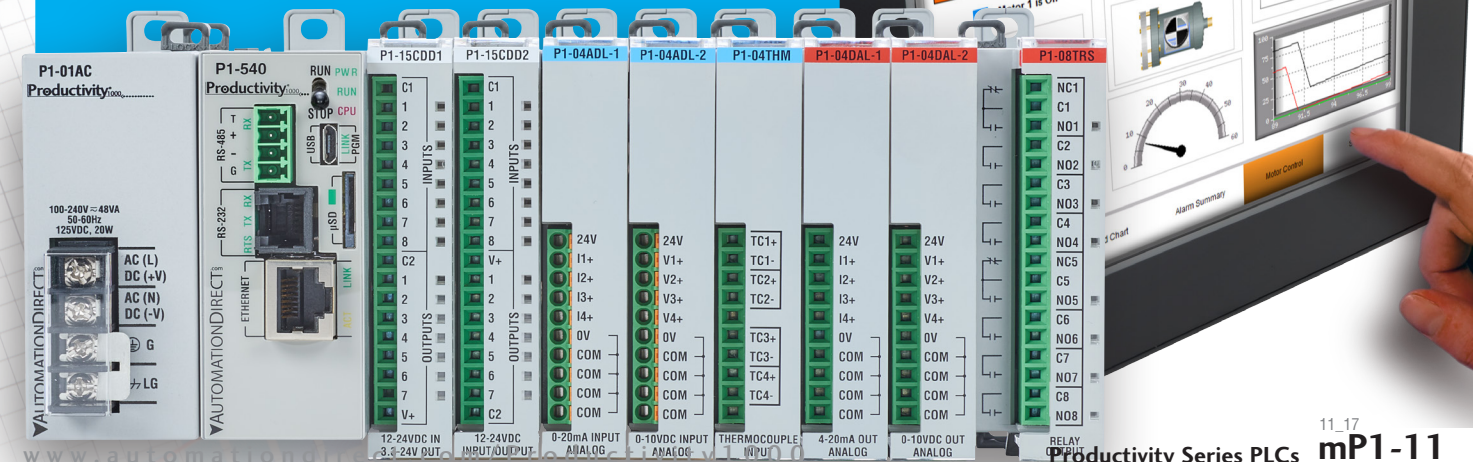
Affordable automation for EVERYONE!

We want the opportunity to serve anyone in need of an affordable automation solution. Whether you're dealing with tight budget constraints or you're just tired of getting squeezed for every last dollar you have, the Productivity series of PLCs has a solution for you.

With a focus on customer satisfaction, the Productivity1000 PLC was designed to provide the advanced features you need at a price anyone, not just the big guys, but anyone can afford. On top of the low-cost hardware, you also get FREE software, FREE tech support for the life of the product, FREE training and many other goodies to help you smoothly and successfully complete your project.

BREAK FREE FROM A-B!
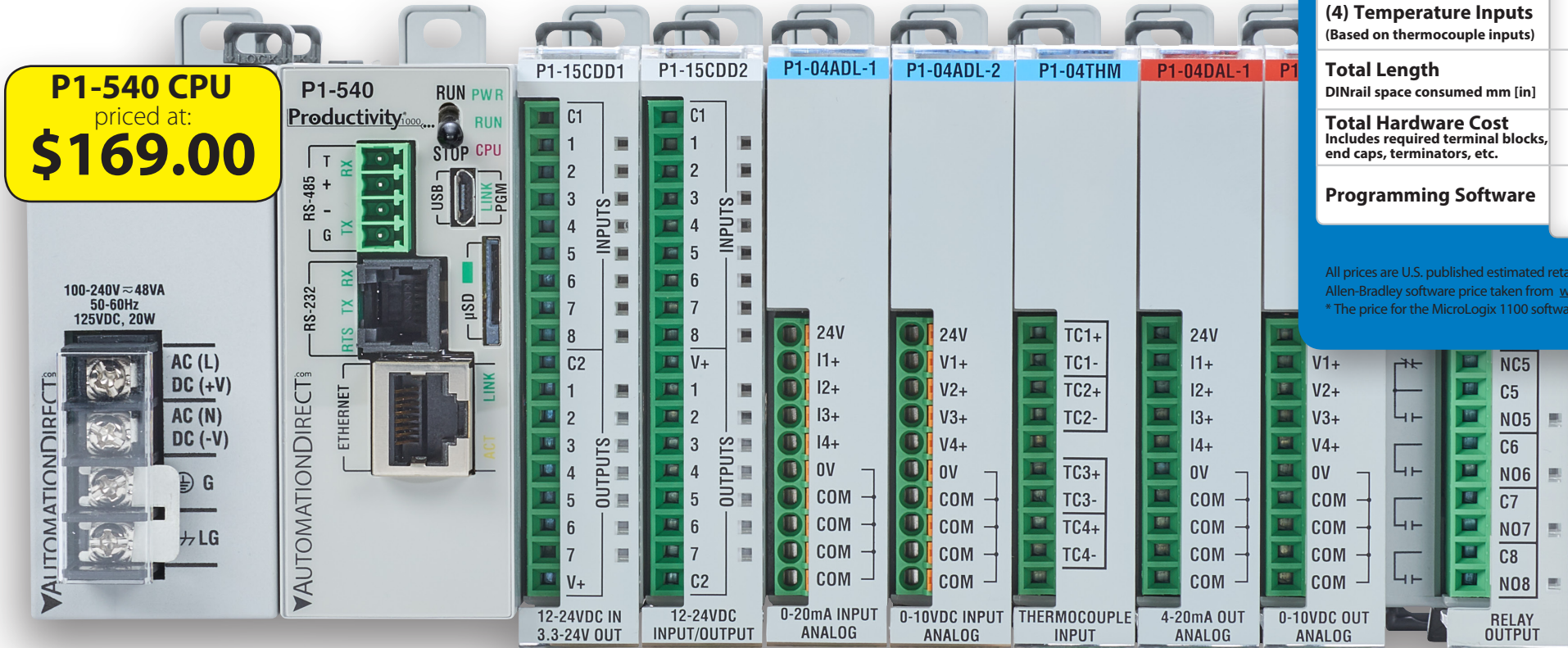
| CPU and I/O Comparison	AutomationDirect Productivity1000	VS.	Allen-Bradley Micro850	Allen-Bradley MicroLogix 1100
CPU/PLC (with Ethernet)	$169.00 P1-540		$442.00 2080-LC50-24QVB	$704.00 1763-L16BBB
(40) 24VDC Inputs (Built-in I/O included)	$295.00 (5) P1-15CDD1 combo		$586.00 (1) 2085-IQ32 + (2) 2085-OV16	$872.00 (1) 1762-IQ32T + (1) 1762-OB32T
(32) 24VDC Outputs (Built-in I/O included)				
(4) Analog Inputs (Built-in I/O included)	$67.00 (1) P1-04ADL-1		$222.00 (1) 2085-IF4	$405.00 (1) 1762-IF2OF2 combo
(4) Analog Outputs (Built-in I/O included)	$95.00 (1) P1-04DAL-1		$222.00 (1) 2085-OF4	
(4) Temperature Inputs (Based on thermocouple inputs)	$119.00 (1) P1-04THM		$343.00 (1) 2085-IRT4	$564.00 (1) 1762-IT4
Total Length DINrail space consumed mm [in]	170mm [6.7"]		349mm [15.50"]	270mm [10.63"]
Total Hardware Cost Includes required terminal blocks, end caps, terminators, etc.	$787.50		$1,830.20	$2,545.00
Programming Software	FREE PS-PGMSW		FREE Connected Component WB	$5,890.00 9324-RL0700NXENE*

All prices are U.S. published estimated retail prices. AutomationDirect prices as of 11/01/2017. Allen-Bradley hardware prices taken from www.radwell.com 10/11/2017. Allen-Bradley software price taken from www.rexelusa.com 10/11/2017.
* The price for the MicroLogix 1100 software assumes the professional version, which includes RSNetWorx for EtherNet/IP configuration. No EtherNet/IP = $2,670.

P1-540 CPU priced at: $169.00

P1-540 Productivity1000

RUN PWR
RUN
STOP CPU

100-240V≈48VA 50-60Hz 125VDC, 20W

AC (L) DC (+V)
AC (N) DC (-V)
G
LG

RS-485 T + - G
USB LINK PGM
RS-232 RTS TX RX
µSD
ETHERNET LINK ACT

P1-15CDD1	P1-15CDD2	P1-04ADL-1	P1-04ADL-2	P1-04THM	P1-04DAL-1	P1-...
INPUTS C1 1 2 3 4 5 6 7 8 C2 1 2 3 4 5 6 7 V+	INPUTS C1 1 2 3 4 5 6 7 8 V+ 1 2 3 4 5 6 7 C2	24V I1+ I2+ I3+ I4+ 0V COM COM COM COM	24V V1+ V2+ V3+ V4+ 0V COM COM COM COM	TC1+ TC1- TC2+ TC2- TC3+ TC3- TC4+ TC4-	24V I1+ I2+ I3+ I4+ 0V COM COM COM COM	V1+ V2+ V3+ V4+ 0V COM COM COM COM
12-24VDC IN 3.3-24V OUT	12-24VDC INPUT/OUTPUT	0-20mA INPUT ANALOG	0-10VDC INPUT ANALOG	THERMOCOUPLE INPUT	4-20mA OUT ANALOG	0-10VDC OUT ANALOG

NC5 C5 NO5 C6 NO6 C7 NO7 C8 NO8 — RELAY OUTPUT

2 YEAR WARRANTY

30-day Money-Back Guarantee 30 day

FREE shipping - orders over $49 2-day Shipping

VOTED Best in SERVICE 15 YEARS

Productivity® 1000

Get affordable, reliable control and never pay for software or technical support again!

FREE Technical Support — Located in USA

FREE software and manuals
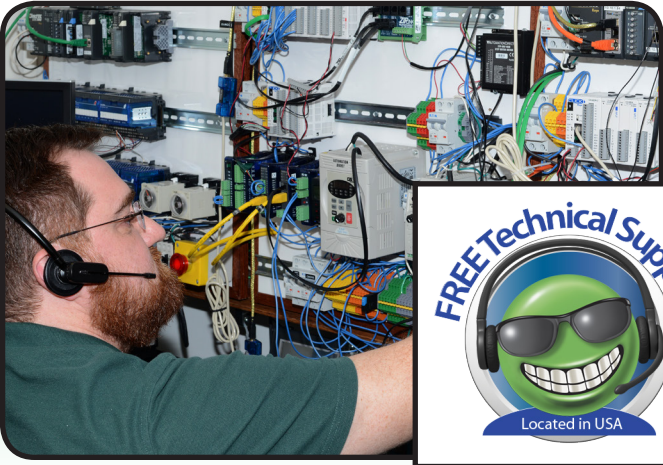
PLUS FREE TRAINING
with every Productivity1000 purchase!

30 Days of Free Training! Your purchase of this Productivity1000 product qualifies you for 30 days of free online training.

Visit www.productivity2000training.com and enter the code above to take advantage of this offer!

INTERCONNECTING AUTOMATION

AUTOMATIONDIRECT

Productivity from start to finish

Productivity soars when you have the tools you need to get the job done. The Productivity1000 starter kit and the FREE Productivity Suite programming software provide everything you need to get a jump start on your next application.
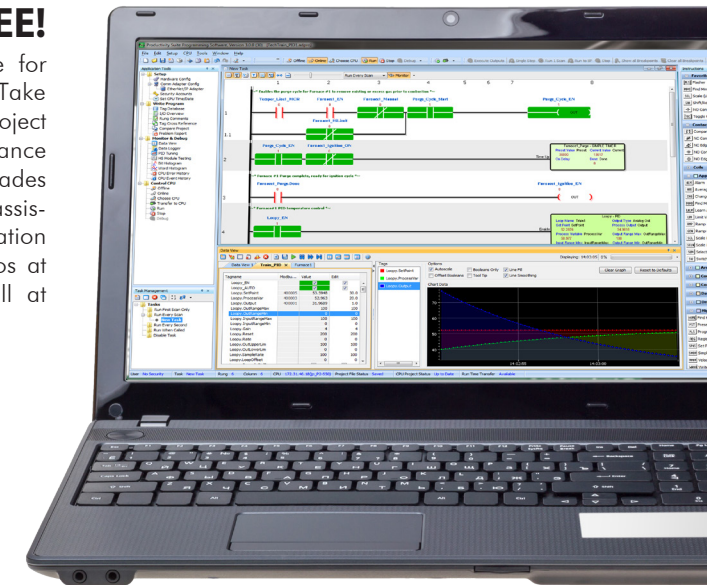
Don't wait. Get started now for FREE!

The Productivity Suite programming software is available for download free of charge at www.ProductivityPLC.com. Take it for a test drive before you buy or get started on your project immediately. There are no licensing fees or maintenance charges to be concerned with and any subsequent upgrades are available for free download as well. If you need assistance, the embedded help file contains detailed information on over 260 topics; also check out our instructional videos at http://www.automationdirect.com/videos or give us a call at 770-844-4200 - we are here to help.

FREE Software

Productivity1000 Starter Kit
$399
(P1-START)

FREE Software!
Download as often as you need.
No license or key needed.
Click here to download.

30 days FREE online training - see inside!

Productivity1000
STARTER KIT
Productivity1000
Automation Direct

FREE shipping - orders over $49
2-day Shipping

30-day Money-Back Guarantee
30 day

What's in the Starter Kit?

✔ (1) P1-540 CPU
✔ (1) P1-01AC power supply
✔ (1) P1-08SIM input simulator module
✔ (1) P1-08TRS relay output module
✔ (1) P1-18RTB screw type terminal block
✔ (1) P1-18RTB-1 spring clamp terminal block
✔ (1) Power terminal block
✔ (1) RS-485 4-pin terminal block
✔ (1) ZL-P1-CBL10 ZIPLink cable
✔ (1) ZL-RTB20-1 ZIPLink feedthrough connector module
✔ (1) USB-CBL-AMICB6 programming cable
✔ (1) PS-PGMSW USB Card w/ P1-USER-M manual
✔ (1) MICSD-16G microSD memory card
✔ (1) Mini torque screw driver
✔ (1) 3-wire power cable
✔ (1) 30-day FREE ICA training certificate
✔ (1) Product inserts for Productivity1000 hardware items
✔ (1) Battery backup

Increase your productivity in more ways than one!

The Productivity Series offers a scalable controls solution with three low-cost hardware platforms and one FREE, powerful programming package. No matter the application, big or small, Productivity has the I/O, communications and affordability you need.

Productivity Series
Engineered in USA

FREE software and manuals

FREE Technical Support
Located in USA

Click on part number (in second row) to be taken directly to AutomationDirect.com to check current pricing, stock status, tech specs, industry approvals, videos, photos and more . . .

Feature	Productivity3000			Productivity2000	Productivity1000
	P3-550 CPU	P3-550E CPU	P3-530 CPU	P2-550 CPU	P1-540 CPU
User Display on CPU	✔	✔	---	✔	---
Built-in USB Programming Port	✔	---	---	✔	✔
Built-in Serial Ports (RS-232 & RS-485)	2	2	2	2	2
Built-in Ethernet Ports (RJ45)	2	2	1	2	1
EtherNet/IP Protocol	✔	✔	---	✔	✔
Modbus RTU (serial) & Modbus TCP (Ethernet)	✔	✔	✔	✔	✔
Remote Expansion Support	✔	✔	---	✔	---
Local Expansion Support	✔	✔	✔	---	---
Intelligent Module Support	✔	✔	✔	✔	---
Total I/O Capacity	59,840	59,840	3,520	4,320	128
Hot Swappable I/O Modules	✔	✔	✔	✔	---
Integrated GSDrive Support	✔ 32 max.	✔ 32 max.	---	✔ 16 max.	---
Data Port (data logging & project transfer)	✔ USB	✔ USB	✔ USB	✔ microSD	✔ microSD*
Total Memory	50 MB	50 MB	25 MB	50 MB	50 MB
Average Scantime (μsec) (1K boolean, 128 I/O)	380	380	380	200	1300
Price	$799	$449	$419	$255	$169

* Project transfer from the microSD card is not supported in the P1-540 CPU

P3-550E CPU
P3-550 CPU
P3-530 CPU
P2-550 CPU
P1-540 Productivity

SHUTDOWN: SAFETY INTERLOCK TRIPPED

Productivity® Series

FREE SOFTWARE

FREE Software!
Download as often as you need.
No license or key needed.
Click here to download.