

Analog Input Modules

P2-08NTC (cont'd)

General Specifications	
Operating Temperature	0° to 60°C (32° to 140°F)
Storage Temperature	-20° to 70°C (-4° to 158°F)
Humidity	5 to 95% (non-condensing)
Environmental Air	No corrosive gases permitted
Vibration	IEC60068-2-6 (Test Fc)
Shock	IEC60068-2-27 (Test Ea)
Field to Logic Side Isolation	1000VDC
Heat Dissipation	500mW
Enclosure Type	Open equipment
Module Keying to Backplane	Electronic
Module Location	Any I/O slot in a Productivity2000 system
Field Wiring	Removable terminal block (included). The P2-08NTC module is not compatible with the ZIPLink wiring system.
Connector Type (included)	18-position removable terminal block
Weight	136g (4.8 oz)
Agency Approvals**	UL 508 File E139594, Canada & USA CE (EN61131-2*)

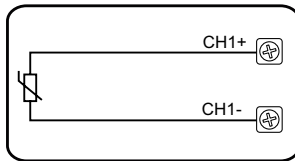
*Meets EMC and Safety requirements. See the Declaration of Conformity for details.
**To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific component part number web page.

Diagnostics	
Module Diagnostics Failure	1 bit per module
Module Not Ready	1 bit per module
Channel Burn-out (Thermistor only)	1 bit per channel
Channel Under-range (Thermistor only)	1 bit per channel
Channel Over-range	1 bit per channel

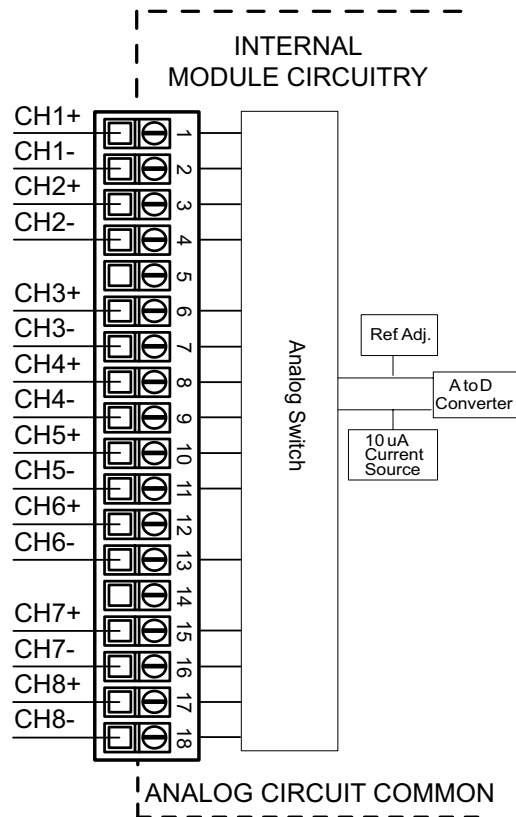
NOTE: At module power-up Channel 1 must have a functional Thermistor connected so internal automatic calibration is performed.

Wiring Diagrams

Thermistor Input



NOTE: Install jumper wire on each unused input. CH1+ to CH1-



I/O Modules

A variety of discrete, analog and specialty I/O modules are available for use in a Productivity2000 system. Specifications for each module are on the following pages.

A filler module is available for unused I/O module slots (part number [P2-FILL](#)).

Discrete Input Modules

Productivity2000 Discrete Input Modules			
Part Number	Number of Inputs	Description	Price
P2-08SIM	8	Input Simulator Module	\$67.00
P2-08ND3-1	8	Sinking/Sourcing 12-24 VDC	\$70.00
P2-16ND-TTL	16	Sinking/Sourcing	\$98.00
P2-16ND3-1	16	Sinking/Sourcing 24V AC/DC	\$98.00
P2-32ND3-1	32	Sinking/Sourcing 12-24 VDC	\$141.00
P2-08NE3	8	Sinking/Sourcing 24V AC/DC	\$57.00
P2-16NE3	16	Sinking/Sourcing 12-24 VDC	\$98.00
P2-32NE3	32	Sinking/Sourcing 24V AC/DC	\$141.00
P2-08NAS	8	AC Isolated 100-120 VAC	\$109.00
P2-16NA	16	AC 100-240 VAC	\$149.00

Specialty Modules

Productivity2000 Specialty Modules			
Part Number	Number of Channels	Description	Price
P2-HSI	2	High-Speed Input	\$278.00
P2-HSO**	2	High-Speed Output	\$278.00
P2-02HSC	2	High-Speed Counter	\$116.00
P2-04PWM	4	Pulse-Width Modulation	\$128.00
P2-SCM	4 ports	Serial Communications Module	\$234.00

** ZIPLink required.

Analog Output Modules

Productivity2000 Analog Output Modules			
Part Number	Number of Channels	Description	Price
P2-04DA	4	Analog Output (Voltage/Current)	\$276.00
P2-04DA-1	4	Analog Output (Current)	\$210.00
P2-04DA-2	4	Analog Output (Voltage)	\$205.00
P2-04DAL-1*	4	Analog Output (Current)	\$157.00
P2-04DAL-2*	4	Analog Output (Voltage)	\$146.00
P2-08DA-1	8	Analog Output (Current)	\$385.00
P2-08DA-2	8	Analog Output (Voltage)	\$353.00
P2-08DAL-1*	8	Analog Output (Current)	\$287.00
P2-08DAL-2*	8	Analog Output (Voltage)	\$278.00
P2-16DA-1	16	Analog Output (Current)	\$503.00
P2-16DA-2	16	Analog Output (Voltage)	\$482.00
P2-16DAL-1*	16	Analog Output (Current)	\$358.00
P2-16DAL-2*	16	Analog Output (Voltage)	\$343.00

* Low resolution analog modules without OLED display.

Discrete Output Modules

Productivity2000 Discrete Output Modules			
Part Number	Number of Outputs	Description	Price
P2-08TD1S	8	Isolated Sinking	\$68.00
P2-08TD2S	8	Isolated Sourcing	\$68.00
P2-15TD1	15	Sinking	\$94.00
P2-15TD2	15	Sourcing	\$92.00
P2-08TD1P	8	Sinking Protected	\$58.00
P2-08TD2P	8	Sourcing Protected	\$58.00
P2-16TD-TTL	16	Sourcing	\$112.00
P2-16TD1P	16	Sinking Protected	\$98.00
P2-16TD2P	16	Sourcing Protected	\$98.00
P2-32TD1P	32	Sinking Protected	\$141.00
P2-32TD2P	32	Sourcing Protected	\$141.00
P2-08TAS	8	Isolated AC	\$149.00
P2-16TA	16	100-240 VAC Output	\$184.00
P2-06TRS	6	Isolated Relay	\$107.00
P2-08TRS	8	Isolated Relay	\$71.00
P2-16TR	16	Relay	\$134.00

Analog Input Modules

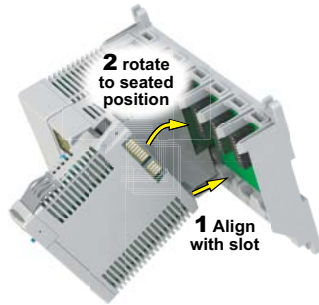
Productivity2000 Analog Input Modules			
Part Number	Number of Channels	Description	Price
P2-04AD	4	Analog Input (Voltage/Current)	\$278.00
P2-04AD-1	4	Analog Input (Current)	\$210.00
P2-04AD-2	4	Analog Input (Voltage)	\$216.00
P2-08AD-1	8	Analog Input (Current)	\$293.00
P2-08AD-2	8	Analog Input (Voltage)	\$322.00
P2-08ADL-1*	8	Analog Input (Current)	\$205.00
P2-08ADL-2*	8	Analog Input (Voltage)	\$222.00
P2-16AD-1	16	Analog Input (Current)	\$354.00
P2-16AD-2	16	Analog Input (Voltage)	\$392.00
P2-16ADL-1*	16	Analog Input (Current)	\$252.00
P2-16ADL-2*	16	Analog Input (Voltage)	\$279.00
P2-06RTD	6	Analog RTD Input	\$460.00
P2-08NTC	8	Analog Thermocouple Input	\$410.00
P2-08THM	8	Analog Thermistor Input	\$452.00

Productivity2000 Analog Input/Output Modules			
Part Number	Number of Channels	Description	Price
P2-8AD4DA-1	8/4	Analog Input/Output (Current)	\$441.00
P2-8AD4DA-2	8/4	Analog Input/Output (Voltage)	\$441.00

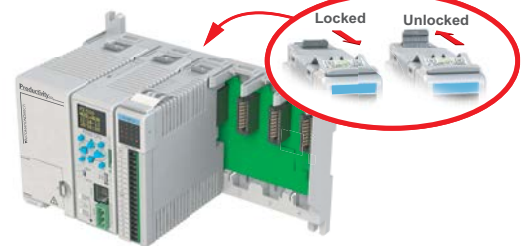
I/O Module Installation Procedure

WARNING: DO NOT APPLY FIELD POWER UNTIL THE FOLLOWING STEPS ARE COMPLETED. SEE HOT-SWAP PROCEDURE FOR EXCEPTIONS.

Step One: Align module catch with base slot and module into connector.



Step Two: Pull top locking tab toward module face. Click indicates lock is engaged.



Step Three: Attach field wiring using removable terminal block or ZIPLink wiring system.



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 MODULES UNLESS THE AREA IS KNOWN TO BE NON-HAZARDOUS.