

NeoPAC SoftPLC®

Applications

- ◆ PLC logic and I/O Control
- ◆ Protocol Converter (Gateway)
- ◆ Data Logging, Database Interface
- ◆ Remote Alarming
- ◆ “Headless” virtual HMI to browser

General Description

NeoPAC SoftPLC®’s are a family of open architecture Programmable Automation Controllers (PAC’s) that provide scalable solutions for a wide range of applications. NeoPACs are priced to meet the needs of small I/O machine control applications, yet have more than enough power and capacity for large process control applications.

Every NeoPAC includes the functions and features of all SoftPLC controllers including:

- ◆ Deterministic, high speed program execution
 - ◆ “Unlimited” user logic and data table memory
 - ◆ Ladder logic and data table addressing similar to Allen-Bradley PLC-5/SLC-500
 - ◆ Fully documented applications, all documentation resides in the controller
 - ◆ SoftPLC TagWell™ IoT cloud interface
 - ◆ Data logging to local/remote drives and databases
 - ◆ Industry standard protocols for communications and I/O including ModbusTCP, Ethernet/IP™, DF1, Modbus RTU, and others
 - ◆ Supports user functions written in C++
 - ◆ Compatible with all HMI/SCADA products
 - ◆ Embedded HMI and web server options
- NeoPAC’s are programmed and maintained with TOPDOC® NexGen via Ethernet. TOPDOC NexGen is available for the Windows and Linux operating systems.



Hardware Features

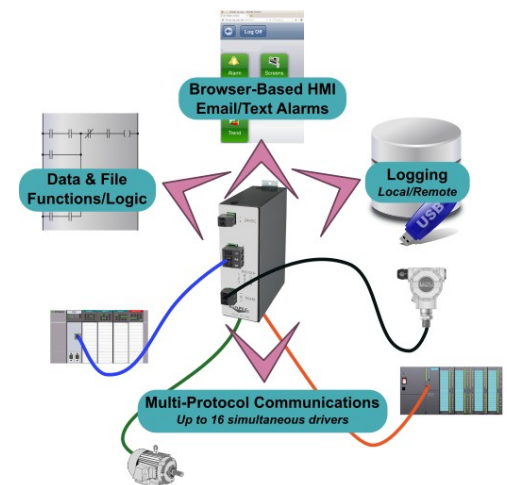
- Powerful CPU – 64-bit quad-core ARM® processor
- Memory – minimum 512MB RAM
- Storage - 8GB on-board flash plus optional MicroSD flash
- (2) configurable communication ports
- GB Ethernet port
- (2) USB 2.0 host ports
- Embedded Wireless (option)
- Wide range 6-72V DC input power
- DIN-rail mount

Communication and I/O Ports

The NeoPAC can interface to devices from hundreds of vendors including I/O, instruments, drives, HMI/SCADA, and more.

A-B “BlueHose” Ports!

Up to 2 optional “bluehose” ports allow the NeoPAC to communicate on Allen-Bradley Data Highway Plus (DH+) or Remote I/O (RIO) networks.



A:OUTSIDE_AIR

LES

A < B

A: N007:010

1609

B: 1936

FAN_ENABLE

B003

N010:028

10

02

SPECIFICATIONS		
Processor	64-bit quad-core ARM® processor	
User Memory	Minimum 512 MB RAM. 8GB onboard eMMC flash	
Removable Memory	MicroSD (<i>optional - no card included</i>)	
Operating Temp	0~60°C, -20~70°C option (storage -40~85°C)	
Humidity	0~95%. non-condensing	
Input Voltage Range	6~72 VDC via terminal block connector	
Power Requirements	2-5W based on options selected	
Communication Ports	(1) GB Ethernet port (10/100/1000) (2) independent USB 2.0 Host ports (1) MicroUSB serial console access (for troubleshooting)	
Option Ports (2)	A-B Bluehose, supports DH+ or RIO Scanner / Adapter RS-485, 2-wire, isolated Other (future) eg: RS-232, CAN...	
Protocols	Serial	Modbus Master/Slave, DF1, ASCII
	Ethernet	ModbusTCP, DF1 Ethernet (PCCC), Ethernet/IP™
Remote I/O Interfaces	Ethernet, USB, serial option ports A-B RIO via SPO-BH option	
Dimensions (HxWxD)	3.945 x 1.349 x 3.823 in (100.2 x 34.26 x 97.1 mm)	
Packaging	Fanless/Diskless system, Metal enclosure, DIN-rail Mount	
Time	NTP Client, update via internet or NTP Server on local LAN	
Security	Embedded Gatecraft™ Firewall/VPN option SSH server for encrypted data transfer	
LED's	(2) System Status, (2) Option Port Status, (2) Ethernet	

ORDERING INFORMATION	
Part Number	Description
SN2-A1-x *	NeoPAC SoftPLC
SPO-BH	NeoPAC BlueHose Option Port
SPO-485	NeoPAC RS-485 Option Port
SPO-WIFIMOD	Wifi Antenna Extension
SPO-EXTEMP	Expands operating temp
SPZ-WEB	Embedded Web Server Option
SPZ-EML	Send Email Option
SSH-xL	Embedded HMI Options

* x is license size from table below

Runtime License Sizes				
Catalog Number Suffix	ModbusTCP Servers	Ethernet/IP Connection Bytes	Discrete Inputs / Logical A-B RIO Racks	Discrete Outputs / Logical A-B RIO Racks
LT	2	64	128 / 1	128 / 1
1K	16	256	up to 1024 / 8	up to 1024 / 8
2K	32	1024	up to 2048 / 16	up to 2048 / 16
8K	127	4096	up to 8192 / 64	up to 8192 / 64