



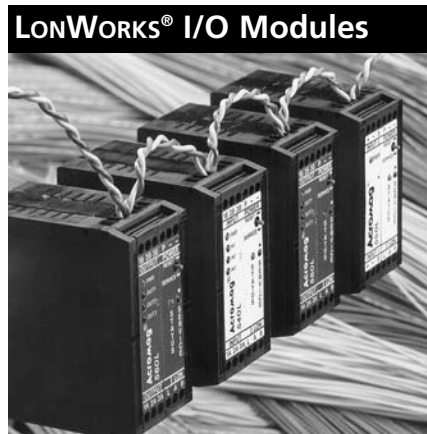
LONWORKS® I/O System

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For more information on the SmartPack I/O System, please download information from our Web site.

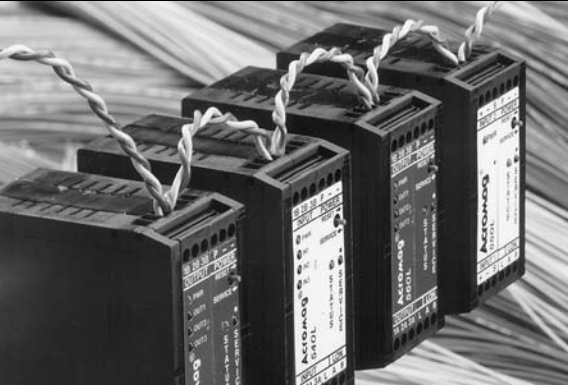


SmartPack distributed control networks enable peer-to-peer communication across a twisted-pair cable.

	540L	550L	560L	570L	580L
INPUTS					
LonWorks communication (SNVT)			x	x	x
DC current input		x			
DC voltage / millivolt input		x			
Thermocouple input		x			
RTD input		x			
Relay	x				x
OUTPUT					
LonWorks communication (SNVT)	x	x	x	x	x
DC current				x	
Relay			x		x



LONWORKS® I/O Modules

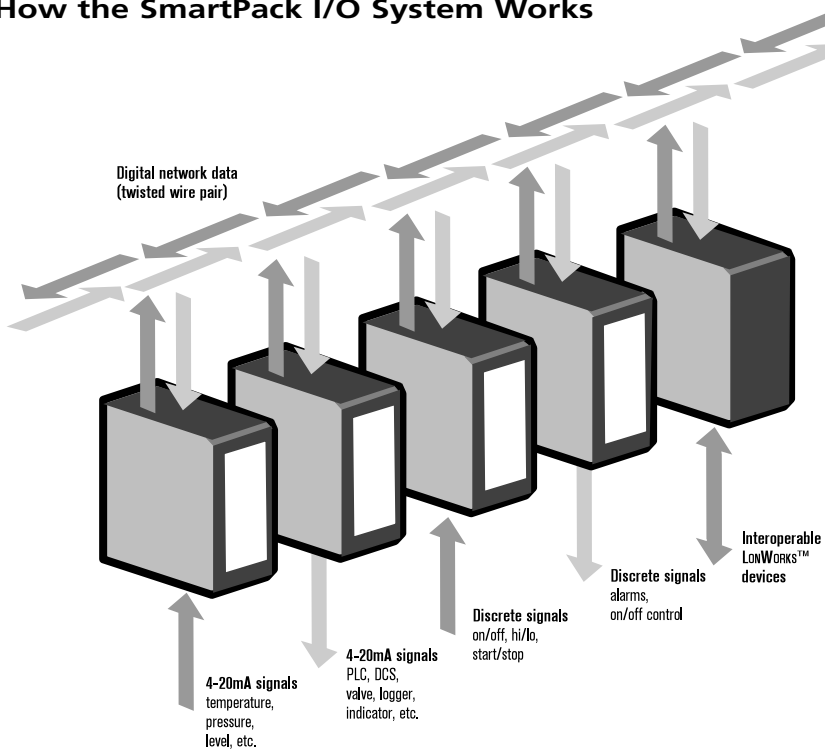


SmartPack I/O System

The LONWORKS-Based Intelligent Distributed Control Network

By distributing system intelligence and processing demands to the field, you can significantly reduce the cost and complexity of designing, installing and maintaining your control system. Acromag SmartPacks are a complete system of industrial I/O modules based on LonWorks. These modules are interconnected using only a single twisted pair cable - no expensive "home run" signal wiring to a central controller or PLC is required.

How the SmartPack I/O System Works



SmartPack Modules

Analog I/O Modules

- Temperature input modules:
 - thermocouple/RTD input
 - relay output
 - LonWorks protocol output
- DC input modules:
 - voltage/current input
 - LonWorks protocol output
- DC output modules:
 - LonWorks protocol input
 - current output

Digital I/O Modules

- Discrete input modules:
 - AC/DC voltage or TTL input
 - LonWorks protocol output
- Discrete output modules:
 - LonWorks protocol input
 - relay or open-drain FET output

Power Requirement

10 to 36V DC

Special Features

- Long-distance, multi-site communication supports up to 64 I/O modules across 6,500 feet
- Peer-to-peer communications reduces wiring cost and complexity
- Event-driven communication reduces network bandwidth demands
- Standardized protocol ensures interoperability with third-party hardware and software
- Isolation prevents ground loops and protects equipment
- Third-party configuration software available. Call for a list of vendors.



■ Everything you need for intelligent distributed control

Acromag offers a comprehensive line of input, output and I/O modules, as well as configuration software and all the accessories needed to get your control system up and running.

■ Ordering information

For complete ordering information, ask for the SmartPack I/O System Catalog, #8400-119.

Analog I/O Modules

Temperature Input

550L1-502-TEMPMR-10-NCR

550L3-502-TEMPMR-10-NCR

Input: one thermocouple/RTD input and one local ambient temperature sensor

Output: one SPDT relay output and data communication to network

Transceiver:

550L1: twisted-pair (TP/XF-78) or

550L3: free topology (TP/FT-10)

DC Voltage (Low-Level) or Current Input

550L1-503-4V1-10-NCR*

550L3-503-4V1-10-NCR*

Input: four $\pm 1V$ DC or $\pm 20mA$ DC inputs (supports 0-20A AC with optional sensor)

Output: data communication to network

Transceiver:

550L1: twisted-pair (TP/XF-78) or

550L3: free topology (TP/FT-10)

DC Voltage (High-Level) Input

550L1-504-4V2-10-NCR*

550L3-504-4V2-10-NCR*

Input: four $\pm 100V$ DC inputs

Output: data communication to network

Transceiver:

550L1: twisted-pair (TP/XF-78) or

550L3: free topology (TP/FT-10)

DC Current Output

570L1-701-C1-10-NCR

570L3-701-C1-10-NCR

Input: data communication from network

Output: two 4-20mA DC outputs

Transceiver:

570L1: twisted-pair (TP/XF-78) or

570L3: free topology (TP/FT-10)

Discrete I/O Modules

Discrete Input with Logic Functions

540L1-401-3DC-10-NCR

540L3-401-3DC-10-NCR

540L1-401-3AC-10-NCR

540L3-401-3AC-10-NCR

Input:

-3DC: three 0-55V DC inputs

-3AC: three 80-125AC/DC inputs

Output: data communication to network

Functions: AND, OR, inverter, D flip-flops

Transceiver:

540L1: twisted-pair (TP/XF-78) or

540L3: free topology (TP/FT-10)

Low-Cost Discrete Input

540L1-410-8DI-10-NCR

540L3-410-8DI-10-NCR

Input: eight 0-42V DC, TTL threshold inputs

Output: data communication to network

Transceiver:

540L1: twisted-pair (TP/XF-78) or

540L3: free topology (TP/FT-10)

Relay Output with Limit Alarms

560L1-601-3MR-10-NCR

560L3-601-3MR-10-NCR

560L1-601-3SS-10-NCR

560L3-601-3SS-10-NCR

Input: data communication from network

Output:

-3MR: three SPST mechanical relay outputs

-3SS: three SPST solid-state relay outputs

Functions: limit alarms, programmable logic gates

Transceiver:

560L1: twisted-pair (TP/XF-78) or

560L3: free topology (TP/FT-10)

Low-Cost Discrete Output

560L1-610-8DO-10-NCR

560L3-610-8DO-10-NCR

Input: data communication from network

Output: eight open-drain FETs, Form A SPST output

Transceiver:

560L1: twisted-pair (TP/XF-78) or

560L3: free topology (TP/FT-10)

Discrete Input and Output

580L1-810-4I4O-10-NCR

580L3-810-4I4O-10-NCR

Input: four 0-42V DC, TTL threshold inputs and data communication from network

Output: four open-drain FETs, Form A SPST output

Transceiver:

580L1: twisted-pair (TP/XF-78) or

580L3: free topology (TP/FT-10)

Software

Configuration software available from 3rd-party vendors. Call for more information.

Accessories

5029-625

Network Terminator

5029-620

Modular Plug and Cable

Power supplies

See Power Supplies on page 183.

DIN RAIL 3.0

DIN RAIL 16.7

DIN rail strip, Type T, 3 inches (75mm) or 16.7 inches (425mm)

20RM-16-DIN

19" rack-mount kit with DIN rail. Holds ten modules.

350T-N4-WM

NEMA 4 water-tight enclosure, wall-mount. Holds one module.

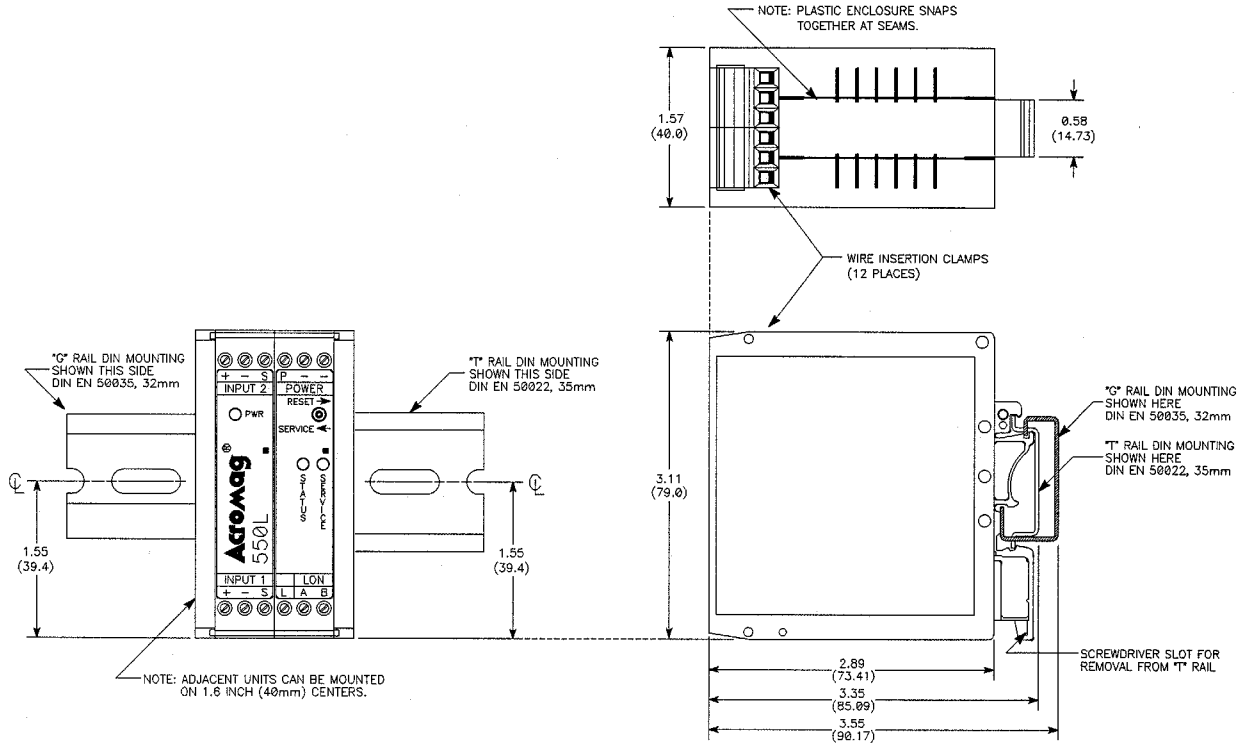
350T-N12-WM

NEMA 12 oil-tight enclosure, wall-mount. Holds one module.

* To order factory calibration, append "-C" to the model number. Ex. 550L1-503-4V1-10-NCR-C.



Dimensions



Wiring Diagram

