

Woodward 9905-971

Product Reference

Woodward First-generation LON LinkNet 16-channel 24 V DC discrete input module

DOCUMENT SCOPE

Independent Apter Power manual compiled only from the cited Woodward manufacturer sources. No product photograph is included.

Product / lookup identity	Woodward 9905-971
Reference number	9905-971
Document basis	Published Woodward product records, PDFs, and manuals listed on page 3



Product page

<https://www.apterpower.com/WOODWARD/9905-971>

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Product role and published parameters

WHAT IT IS, WHAT IT DOES, AND WHERE IT FITS

Woodward 9905-971 is an obsolete first-generation LON LinkNet distributed I/O module with 16 discrete input channels for 24 V DC field-contact signals. It receives open/closed states from field switches and relay contacts, passes each energized input through an optoisolator and channel LED into its shift-register and local processor, and transmits the resulting states over the LON LinkNet transceiver to the host controller. System context: Woodward First-generation LON LinkNet 16-channel 24 V DC discrete input module.

Published field	Manufacturer-published value or verified identity note
Product family	First-generation LON LinkNet distributed I/O
Part number	9905-971
Module type	Discrete input
Input channels	16
Nominal field signal	24 V DC discrete input
Discrete input current	13.1 mA per channel when on at 24 V
Power-supply input	18 to 32 V DC

System function and signal path

01	Field Inputs: Sixteen on/off states from field switches and relay contacts using the module's 24 V DC discrete-input circuits.
02	Channel Processing: A closed contact energizes the channel, passing the state through an optoisolator and LED to the shift register; the module processor reads the state.
03	Network Transfer: The module processor transmits channel states through the LinkNet transceiver to the host controller over the LON network.
04	Diagnostics: Channel LEDs indicate closed contacts. A FAULT LED reports module-processor status; address, type, and no-message faults are annunciated by the host application when configuration or communication is incorrect.

Applications, answers, and official sources

- 1** Legacy engine sequencing: Acquires non-time-critical contact states used by an approved Woodward 723 or 723PLUS engine-control application.
- 2** Generator-set status monitoring: Transfers breaker, permissive, alarm, or auxiliary-contact states when those functions are defined in the controller program; no specific field device is included.
- 3** Distributed cabinet or engine I/O: DIN-rail mounting allows the module to be located in a control cabinet or near the engine within Woodward's environmental and network-wiring limits.
- 4** Legacy LinkNet maintenance: Supports an installed first-generation LON LinkNet node position when the exact part, node address, field wiring, and obsolete-product maintenance plan have been verified.

Frequently asked questions

What is Woodward 9905-971?	It is a first-generation LON LinkNet distributed I/O module with 16 discrete input channels for 24 V DC field-contact signals.
How many inputs does 9905-971 provide?	Woodward specifies 16 discrete input channels.
Which signals does the module read?	It reads open and closed states from field switches and relay contacts. A closed contact drives the channel through an optoisolator and LED before the state is sent to the module processor.
What supply does it require?	The official manual specifies an 18 to 32 V DC power-supply input and 6.5 W required at 24 V.
What current does an active input draw?	Woodward specifies 13.1 mA per channel when on at 24 V.
How is the LinkNet node address set?	Two rotary switches set the node address. It must match the address assigned in the controller application, and power must be cycled after the switches are changed.

Official Woodward sources

LON-based LinkNet Modules Final Production Stop Notification	https://www.woodward.com/products/wp-content/uploads/sites/3/2024/08/B06988_-.pdf
LINKnet Nodes and I/O Controller Module Obsolescence	https://www.woodward.com/products/wp-content/uploads/sites/3/2024/08/06923_A.pdf
723 Control/DSLCL Compatible Product Manual	https://www.woodward.com/products/wp-content/uploads/sites/3/2024/08/02784_A.pdf