

WESTINGHOUSE 1C31142G01

Contact Input Module

WESTINGHOUSE 1C31142G01 is a 16-channel Ovation contact input electronics module using a 48 VDC on-card wetting supply for single-ended field contacts.

01 Sixteen contact-input channels	02 48 VDC on-card wetting supply	03 Single-ended common-return architecture	04 1C31110G03 personality-module pairing
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System position

Dry field contact	1C31110G03 personality module	1C31142G01 electronics	Ovation controller digital state
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Product and release scope

Exact identity WESTINGHOUSE 1C31142G01 is retained without shortening its suffix.	Engineering use WESTINGHOUSE 1C31142G01 is intended for contact-state acquisition where all sixteen channels share the documented single-ended return arrangement. Its wetting supply and debounce timing must be verified with the field wiring before return to service.	Verification boundary Only exact-model or explicitly applicable family facts are populated.	Acceptance Connections, configuration, function and safe response require recorded proof.
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Verified technical matrix

Product class	Contact input electronics module
Channel count	16
Field-input type	Current-sourcing contact input
Wetting supply	48 VDC on card
Auxiliary supply range	42-55 VDC

Input arrangement	Single-ended with common return
Paired personality module	1C31110G03
Propagation delay	7 ms maximum
Contact-bounce response	Rejects less than 3 ms; accepts greater than 7 ms

Interface architecture

Contact boundary	Wetting boundary	Personality interface	Controller interface
Sixteen field contacts referenced to the documented common return	Current-limited on-card 48 VDC auxiliary supply	1C31110G03 field-termination and signal-routing stage	Debounced contact states transferred to the Ovation I/O bus

Control path

Dry field contact	1C31110G03 personality module	1C31142G01 electronics	Ovation controller digital state
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Technical service focus

H1	H2	H3	H4
Sixteen contact-input channels	48 VDC on-card wetting supply	Single-ended common-return architecture	1C31110G03 personality-module pairing

Use cases with controlled scope

Interlock monitoring Reads dry-contact permissive and interlock states in an Ovation system.	Alarm contact acquisition Captures sixteen discrete alarm or equipment-status contacts.	Legacy input replacement Restores the existing contact-input slot while retaining field wetting and common-return wiring.	Bounce-sensitive troubleshooting Supports timing checks where contact bounce or marginal field voltage affects state recognition.
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INTEGRATION CHECKPOINTS

Identity WESTINGHOUSE 1C31142G01 remains complete in purchasing, drawings and labels.	Host system Installed position and surrounding hardware are verified before exchange.	Configuration Project data, jumpers, wiring and settings are recorded as applicable.	Acceptance Functional and safe-state evidence is captured before release.
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Installation decision points

1 Isolate the on-card wetting supply and external circuits before handling WESTINGHOUSE 1C31142G01.	2 Verify the G01 electronics module and 1C31110G03 personality module pairing before replacement.	3 Record all sixteen channel assignments and the common-return wiring before disconnecting field conductors.	4 Confirm that field devices are dry contacts suitable for the module's 48 VDC current-limited wetting circuit.
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System relationship

Dry field contact	1C31110G03 personality module	1C31142G01 electronics	Ovation controller digital state
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FAQ decision matrix

Engineering decision	Controlled response
How many inputs does WESTINGHOUSE 1C31142G01 provide?	It provides sixteen contact-input channels.
What wetting voltage is used by WESTINGHOUSE 1C31142G01?	The module uses an on-card 48 VDC wetting supply.
Which personality module pairs with WESTINGHOUSE 1C31142G01?	The documented pairing is 1C31110G03.
What auxiliary range applies to WESTINGHOUSE 1C31142G01?	The documented on-card auxiliary supply operates over 42 to 55 VDC.

Eight release precautions

1 Isolate the on-card wetting supply and external circuits before handling WESTINGHOUSE 1C31142G01.	2 Verify the G01 electronics module and 1C31110G03 personality module pairing before replacement.	3 Record all sixteen channel assignments and the common-return wiring before disconnecting field conductors.	4 Confirm that field devices are dry contacts suitable for the module's 48 VDC current-limited wetting circuit.
5 Do not parallel an external source onto the on-card wetting supply without an approved engineering design.	6 Inspect the base, personality-module connectors and terminal labeling before inserting the replacement.	7 Test both open and closed states for each used channel and observe the documented debounce response.	8 Prove associated alarms, interlocks and safe-state logic before releasing the input module to operation.

Product verification and contact

Evidence applicability

Evidence record	Applicable scope
Ovation I/O Reference Manual R3-1150, contact-input subsystem and specification pages	Supports only the exact-model or explicitly applicable family facts used in this document.
Ovation system contact-input module combination table	Supports only the exact-model or explicitly applicable family facts used in this document.

Related Apter Power references

Related Apter Power references	Scope note
WESTINGHOUSE 1C31132G01	Portfolio reference only; verify compatibility independently.
WESTINGHOUSE 1C31147G01	Portfolio reference only; verify compatibility independently.
WESTINGHOUSE 1C31150G01	Portfolio reference only; verify compatibility independently.

	Apter Power technical support sales13@apterpower.com +86 180 3023 5313 www.apterpower.com	Model record WESTINGHOUSE 1C31142G01 Contact Input Module Verify the complete nameplate before installation.
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