WESTINGHOUSE 5X00594G01

Thermocouple Input Module

WESTINGHOUSE 5X00594G01 is an Ovation sixteen-channel thermocouple input module for low-level millivolt temperature signals.

01	02	03	04
Sixteen thermocouple channels	Low-level millivolt acquisition	±20, ±50 and ±100 mV families	1C31116G05 interface pairing

System position

Thermocouple sensor	1C31116G05 field interface	5X00594G01 conversion stage	Ovation controller

Product and release scope

Exact identity	Engineering use	Verification boundary	Acceptance
WESTINGHOUSE 5X00594G01 is retained without shortening its suffix.	WESTINGHOUSE 5X00594G01 expands low-level temperature acquisition to sixteen channels. Correct thermocouple type, polarity, cold-junction arrangement, cable material and the 1C31116G05 pairing must be verified as one system.	Only exact-model or explicitly applicable family facts are populated.	Connections, configuration, function and safe response require recorded proof.

02 / CAPABILITY AND INTERFACE MAP

Verified technical matrix

Product class	Thermocouple input module
Platform	Ovation I/O
Channel count	16
Input families	±20 mV; ±50 mV; ±100 mV

Field-interface pairing	1C31116G05
Signal class	Low-level thermocouple / millivolt
Main power	2.4 W
Full model	5X00594G01

Interface architecture

Sensor boundary	Field interface	Conversion boundary	Controller boundary
Sixteen thermocouple or low-level millivolt circuits	1C31116G05 signal routing and termination	5X00594G01 low-level acquisition	Temperature or millivolt values delivered to Ovation

Control path

Thermocouple sensor	1C31116G05 field interface	5X00594G01 conversion stage	Ovation controller

Technical service focus

H1	H2	H3	H4
Sixteen thermocouple channels	Low-level millivolt acquisition	±20, ±50 and ±100 mV families	1C31116G05 interface pairing

Use cases with controlled scope

Multipoint temperature monitoring

Collects sixteen temperature channels in an Ovation cabinet.

Low-level millivolt acquisition

Accepts the documented ±20, ±50 and ±100 mV range families.

Legacy input replacement

Restores an existing 5X00594G01 temperature-input position.

Channel fault isolation

Separates sensor, extension wire, terminal, field interface and conversion checks.

INTEGRATION CHECKPOINTS

Identity

WESTINGHOUSE 5X00594G01 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.

Installation decision points

1

Isolate affected thermocouple circuits before handling WESTINGHOUSE 5X00594G01.

2

Confirm the G01 identity and the installed 1C31116G05 field-interface module.

3

Record sensor type, polarity, range, engineering units and cold-junction arrangement for all channels.

4

Use matching thermocouple extension wire and preserve the original polarity end to end.

System relationship

Thermocouple sensor	1C31116G05 field interface	5X00594G01 conversion stage	Ovation controller

FAQ decision matrix

Engineering decision	Controlled response
How many thermocouple channels belong to WESTINGHOUSE 5X00594G01?	It provides sixteen thermocouple input channels.
Which low-level ranges are associated with WESTINGHOUSE 5X00594G01?	The documented input families are ±20 mV, ±50 mV and ±100 mV.
Which field-interface module pairs with WESTINGHOUSE 5X00594G01?	The documented pairing is 1C31116G05.
What type of wiring is critical for WESTINGHOUSE 5X00594G01?	Use the correct thermocouple extension-wire material and preserve polarity and shield routing.

Eight release precautions

1 Isolate affected thermocouple circuits before handling WESTINGHOUSE 5X00594G01.	**2** Confirm the G01 identity and the installed 1C31116G05 field-interface module.	**3** Record sensor type, polarity, range, engineering units and cold-junction arrangement for all channels.	**4** Use matching thermocouple extension wire and preserve the original polarity end to end.
5 Keep low-level wiring segregated from power and switching conductors.	**6** Do not inject voltage outside the configured millivolt family.	**7** Commission with a traceable thermocouple or millivolt source at representative points.	**8** Release the module only after every used channel and its configured alarm behavior agree with the site test.

Product verification and contact

Evidence applicability

Evidence record	Applicable scope
Ovation Planning manual OW351, exact 5X00594G01 thermocouple-module 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 1C31192G01	Portfolio reference only; verify compatibility independently.
WESTINGHOUSE 1C31223G01	Portfolio reference only; verify compatibility independently.
WESTINGHOUSE 1C31238H01	Portfolio reference only; verify compatibility independently.

	Apter Power technical support sales13@apterpower.com +86 180 3023 5313 www.apterpower.com	Model record WESTINGHOUSE 5X00594G01 Thermocouple Input Module Verify the complete nameplate before installation.