WESTINGHOUSE 5X00070G04

Analog Input Module

WESTINGHOUSE 5X00070G04 is an Ovation eight-channel, 14-bit analog input electronics module for low-level 20 mV, 50 mV and 100 mV signal ranges.

01	02	03	04
Eight low-level analog inputs	14-bit input conversion	20 mV, 50 mV and 100 mV ranges	Ovation standard I/O electronics module

System position

Millivolt field source	Matched personality module	5X00070G04 conversion stage	Ovation I/O bus and controller

Product and release scope

Exact identity	Engineering use	Verification boundary	Acceptance
WESTINGHOUSE 5X00070G04 is retained without shortening its suffix.	WESTINGHOUSE 5X00070G04 provides the electronics stage for eight low-level analog channels. Commissioning therefore depends on matching the personality module, field range, polarity, shielding and controller configuration to the installed channel assignment.	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	Analog input electronics module
Platform	Ovation I/O
Channel count	8
Conversion resolution	14 bit

Input ranges	20 mV; 50 mV; 100 mV
Signal family	Low-level millivolt / thermocouple
Module identity	5X00070G04
Form factor	Standard Ovation I/O electronics module

Interface architecture

Field-input boundary

Eight millivolt channels routed through the installed personality module

Signal conditioning

Low-level input conditioning for the selected 20, 50 or 100 mV range

Controller interface

Converted channel values transferred across the Ovation I/O bus

Configuration boundary

Range and channel type retained in the controller engineering database

Control path

Millivolt field source	Matched personality module	5X00070G04 conversion stage	Ovation I/O bus and controller

Technical service focus

H1

Eight low-level analog inputs

H2

14-bit input conversion

H3

20 mV, 50 mV and 100 mV ranges

H4

Ovation standard I/O electronics module

Use cases with controlled scope

Low-level voltage acquisition

Collects eight low-level voltage signals in an Ovation control cabinet.

Thermocouple signal service

Supports the documented low-level thermocouple range family when the matching interface is installed.

Legacy module replacement

Restores an existing G04 analog-input position without changing adjacent I/O.

Channel troubleshooting

Provides a defined test boundary for field signal, personality module and conversion-stage checks.

INTEGRATION CHECKPOINTS

Identity

WESTINGHOUSE 5X00070G04 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 the affected field circuits and observe plant-approved ESD controls before handling WESTINGHOUSE 5X00070G04.

2

Verify the complete G04 identity and the installed personality module before removing the electronics module.

3

Record all eight channel assignments, configured ranges, polarities and engineering units before replacement.

4

Do not apply a voltage beyond the documented 20 mV, 50 mV or 100 mV range selected for the channel.

System relationship

Millivolt field source	Matched personality module	5X00070G04 conversion stage	Ovation I/O bus and controller

FAQ decision matrix

Engineering decision	Controlled response
How many channels does WESTINGHOUSE 5X00070G04 provide?	The module provides eight analog input channels.
Which input ranges belong to WESTINGHOUSE 5X00070G04?	The documented G04 ranges are 20 mV, 50 mV and 100 mV.
What conversion resolution is used by WESTINGHOUSE 5X00070G04?	Its analog conversion is identified as 14 bit.
Where does WESTINGHOUSE 5X00070G04 sit in the signal path?	It is the electronics conversion stage between the installed personality module and the Ovation I/O bus.

Eight release precautions

1 Isolate the affected field circuits and observe plant-approved ESD controls before handling WESTINGHOUSE 5X00070G04.	**2** Verify the complete G04 identity and the installed personality module before removing the electronics module.	**3** Record all eight channel assignments, configured ranges, polarities and engineering units before replacement.	**4** Do not apply a voltage beyond the documented 20 mV, 50 mV or 100 mV range selected for the channel.
5 Maintain shield termination and segregation from high-energy wiring to protect low-level measurement integrity.	**6** Inspect base connectors and module latches for damage or contamination before seating the replacement.	**7** Commission with a traceable low-level source and compare raw input, converted value and controller indication for each used channel.	**8** Release the module only after open-circuit, overrange and normal-signal behavior match the approved site test plan.

Product verification and contact

Evidence applicability

Evidence record	Applicable scope
Emerson document PWS_010193-5X00070G04	Supports only the exact-model or explicitly applicable family facts used in this document.
Ovation I/O Reference Manual R3-1150, analog-input module tables and G04 interface pages	Supports only the exact-model or explicitly applicable family facts used in this document.

Related Apter Power references

Related Apter Power references	Scope note
Ovation 1B30035H01 Base Unit	Portfolio reference only; verify compatibility independently.
WESTINGHOUSE 1C31110G03	Portfolio reference only; verify compatibility independently.
WESTINGHOUSE 1C31116G01	Portfolio reference only; verify compatibility independently.

	Apter Power technical support sales13@apterpower.com +86 180 3023 5313 www.apterpower.com	Model record WESTINGHOUSE 5X00070G04 Analog Input Module Verify the complete nameplate before installation.