# WESTINGHOUSE 7379A21G01

## QAV Analog Input Card

WESTINGHOUSE 7379A21G01 is a six-channel Q-Line QAV analog input card for isolated low-level millivolt acquisition.

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| Six isolated analog channels | -5 to +20 mV normal range | 13-bit digital output | Periodic auto-calibration |

## System position

| | | | |
|---|---|---|---|
| Millivolt sensor | QAV input conditioning | Calibration and data buffer | DIOB controller |

## Product and release scope

### Exact identity

WESTINGHOUSE 7379A21G01 is retained without shortening its suffix.

### Engineering use

For WDPF Q-Line service, WESTINGHOUSE 7379A21G01 combines channel isolation, periodic calibration and buffered digital transfer. The G01 range, source impedance and connector assignment must remain matched during replacement.

### Verification boundary

Only exact-model or explicitly applicable family facts are populated.

### Acceptance

Connections, configuration, function and safe response require recorded proof.

02 / CAPABILITY AND INTERFACE MAP

# Verified technical matrix

| | |
|---|---|
| Product type | QAV analog input point card |
| Group | G01 |
| Channel count | 6 |
| Normal input range | -5 to +20 mVDC |

| | |
|---|---|
| Reduced-accuracy range | -20 to +20 mVDC |
| Maximum source impedance | 500 ohms |
| Resolution | 13 bits including polarity |
| Sample period | 0.20 s at 60 Hz; 0.24 s at 50 Hz |

## Interface architecture

| Sensor boundary | Isolation boundary | Conversion boundary | DIOB boundary |
|---|---|---|---|
| Six low-level analog field inputs | Separate transformer isolation per channel | Conditioning and voltage-to-frequency conversion | Buffered 13-bit values delivered to the controller |

## Control path

| | | | |
|---|---|---|---|
| Millivolt sensor | QAV input conditioning | Calibration and data buffer | DIOB controller |

## Technical service focus

| H1 | H2 | H3 | H4 |
|---|---|---|---|
| Six isolated analog channels | -5 to +20 mV normal range | 13-bit digital output | Periodic auto-calibration |

03 / APPLICATIONS AND INTEGRATION

# Use cases with controlled scope

| Millivolt monitoring | Thermocouple input service | Q-Line spare replacement | Calibration diagnosis |
|---|---|---|---|
| Acquires six low-level process signals. | Supports configured sensors within the G01 range. | Maintains an installed QAV G01 channel set. | Separates field-signal, isolation, calibration and DIOB checks. |

## INTEGRATION CHECKPOINTS

| Identity | Host system | Configuration | Acceptance |
|---|---|---|---|
| WESTINGHOUSE 7379A21G01 remains complete in purchasing, drawings and labels. | Installed position and surrounding hardware are verified before exchange. | Project data, jumpers, wiring and settings are recorded as applicable. | Functional and safe-state evidence is captured before release. |

## Installation decision points

| 1 | 2 | 3 | 4 |
|---|---|---|---|
| Isolate all connected sensors before handling WESTINGHOUSE 7379A21G01. | Match the complete G01 identity and installed QAV card level. | Record every channel range, polarity, shield and sensor assignment. | Keep the connected source impedance within the 500-ohm limit. |

## System relationship

| Millivolt sensor | QAV input conditioning | Calibration and data buffer | DIOB controller |
|---|---|---|---|

# FAQ decision matrix

| Engineering decision | Controlled response |
| --- | --- |
| Which channel count belongs to WESTINGHOUSE 7379A21G01? | It has six individually isolated analog input channels. |
| What is the normal input range for WESTINGHOUSE 7379A21G01? | The G01 normal range is -5 to +20 mVDC. |
| Which extended range is available on WESTINGHOUSE 7379A21G01 at reduced accuracy? | The reduced-accuracy range is -20 to +20 mVDC. |
| What source impedance can be connected to WESTINGHOUSE 7379A21G01? | The source impedance must not exceed 500 ohms. |

## Eight release precautions

| | | | |
| --- | --- | --- | --- |
| **1** Isolate all connected sensors before handling WESTINGHOUSE 7379A21G01. | **2** Match the complete G01 identity and installed QAV card level. | **3** Record every channel range, polarity, shield and sensor assignment. | **4** Keep the connected source impedance within the 500-ohm limit. |
| **5** Preserve the configured 50/60 Hz operating selection where applicable. | **6** Inspect both front-edge field and rear-edge DIOB connectors before seating. | **7** Allow the warm-up and auto-calibration cycle to complete before evaluation. | **8** Use traceable low-level signals to verify all commissioned channels. |

# Product verification and contact

## Evidence applicability

| Evidence record | Applicable scope |
| --- | --- |
| Westinghouse Q-Line Installation Manual M0-0053, QAV Style 7379A21G01 through G09 | 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. |

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| | Apter Power technical support sales13@apterpower.com +86 180 3023 5313 www.apterpower.com | Model record WESTINGHOUSE 7379A21G01 QAV Analog Input Card Verify the complete nameplate before installation. |