Yokogawa AAI543-S00 S1

Complete Product Information

AAI543-S00 S1 distributes sixteen independent current commands from one FIO position while isolating every output channel and supporting documented redundant switch-over behavior.

WHAT THIS PRODUCT DOES

Yokogawa AAI543-S00 S1 is a standard 16-channel isolated analog output module for 4 to 20 mA field loops.

Product characteristic 1

Drives sixteen independent 4 to 20 mA loops.

Product characteristic 2

Provides channel isolation for every output path.

Product characteristic 3

Updates output commands every 10 ms.

Product characteristic 4

Supports pressure-clamp, MIL-cable and KS-cable field interfaces.

PRODUCT-PAGE TECHNICAL SNAPSHOT

Output channels	16
Output signal	4 to 20 mA DC
Channel isolation	Isolated
Output update period	10 ms
Settling time	60 ms
Load resistance	0 to 750 ohms
Open-circuit behavior	Output open-circuit detection
External connection	Pressure clamp terminal, MIL cable or KS cable

IMPORTANT NOTICE

Preserve the complete AAI543-S00 S1 identity and verify its documented electrical, network or signal response before release.

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Scan the approved WhatsApp code for model-specific support.

Features and technical data

TECHNICAL DATA SHOWN ON THE PRODUCT PAGE

Output channels	16
Output signal	4 to 20 mA DC
Channel isolation	Isolated
Output update period	10 ms
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Load resistance	0 to 750 ohms
Open-circuit behavior	Output open-circuit detection
External connection	Pressure clamp terminal, MIL cable or KS cable

FEATURE INTERPRETATION

Product identity

Drives sixteen independent 4 to 20 mA loops.

System role

Provides channel isolation for every output path.

Service context

Updates output commands every 10 ms.

Return-to-service focus

Supports pressure-clamp, MIL-cable and KS-cable field interfaces.

SIGNAL OR CONTROL PATH

Ovation controller → **Output electronics** → **Personality module** → **Analog field loop**

AAI543-S00 S1 should be matched to the documented system position, companion hardware and retained project configuration before the channel or station is returned to control.

PRODUCT-PAGE TECHNICAL QUESTIONS

How many current outputs are available on Yokogawa AAI543-S00 S1?	The module provides sixteen analog output channels.

Common applications

The application groups below reproduce the model-specific uses presented on the product page and connect each use to a practical verification point.

Control-valve positioning

Sends independent 4 to 20 mA commands to final control elements.

Drive and actuator reference

Provides current references to supported field devices.

Redundant FIO output

Maintains analog commands in the documented redundant module arrangement.

Sixteen-loop cabinet retrofit

Replaces a matched output module while retaining field terminations.

APPLICATION VERIFICATION MAP

Control-valve positioning	Confirm the documented system position and the required operating function.
Drive and actuator reference	Compare the restored connection or control path with the approved record.
Redundant FIO output	Check the physical interface and the retained configuration before startup.
Sixteen-loop cabinet retrofit	Record diagnostics and the final controlled response before release.

INFORMATION CARRIED INTO THE WORK RECORD

Identity record

Complete marking and assigned system position.

Connection record

Connector, conductor and interface arrangement as found.

Configuration record

Controlled settings, application data and option state.

Acceptance record

Observed status, response and release decision.

IMPORTANT NOTICE

Use the complete product identifier for every application review; a related product link is not evidence of interchangeability.

APPLICATION QUESTIONS

Does Yokogawa AAI543-S00 S1 isolate its output channels?	Yes. The AAI543 architecture provides isolated output channels.
How often does Yokogawa AAI543-S00 S1 update its outputs?	The documented output update period is 10 ms.
What settling time applies to Yokogawa AAI543-S00 S1?	The documented settling time is 60 ms.

Product precautions and questions

EIGHT MODEL-SPECIFIC PRECAUTIONS

01	Confirm AAI543-S00 S1 and the assigned redundant position.
02	Record all sixteen loop tags and safe output requirements.
03	Place final elements in the approved manual or maintenance state.
04	Remove field power before changing terminal or cable connections.
05	Preserve polarity, shields and isolated channel conductors.
06	Inspect the terminal block and cable interface for full engagement.
07	Drive controlled output points and compare field current.
08	Confirm open-circuit diagnostics and final-element response before release.

FREQUENTLY ASKED TECHNICAL QUESTIONS

How many current outputs are available on Yokogawa AAI543-S00 S1?	The module provides sixteen analog output channels.
Which command signal is generated by Yokogawa AAI543-S00 S1?	Each channel produces a 4 to 20 mA DC output.
Does Yokogawa AAI543-S00 S1 isolate its output channels?	Yes. The AAI543 architecture provides isolated output channels.
How often does Yokogawa AAI543-S00 S1 update its outputs?	The documented output update period is 10 ms.

IMPORTANT NOTICE	Confirm the complete AAI543-S00 S1 marking, assigned system position and mating interfaces before installation.

RELEASE CHECKLIST

Identity accepted	The complete product marking and assigned system position agree.
Interfaces accepted	Connections, retention and controlled configuration match the recorded condition.
Response accepted	Diagnostics and the intended technical response have been documented.

FAQ, configuration control and related models

ADDITIONAL TECHNICAL QUESTIONS

What settling time applies to Yokogawa AAI543-S00 S1?	The documented settling time is 60 ms.
Which loop load can Yokogawa AAI543-S00 S1 drive?	The published load resistance range is 0 to 750 ohms.
How does Yokogawa AAI543-S00 S1 report a broken output loop?	The module provides output open-circuit detection for the affected channel.
Which field interfaces can terminate Yokogawa AAI543-S00 S1?	Pressure-clamp terminal blocks, MIL connector cabling and the dedicated KS cable arrangement are documented.

CONFIGURATION CONTROL RECORD

Configuration identity	Yokogawa AAI543-S00 S1
Technical boundary	Apply only the functions and interfaces shown for this product or its identified system family.
Selection control	Match the complete ordering string and installed interfaces before purchase or installation.

RELATED MODELS ON APTERPOWER

Yokogawa VF702	Related product reference. Review the complete ordering string before selection.
Yokogawa SB311 S1	Related product reference. Compare the required interface and system position.
Yokogawa ANB10D-427/CU2T	Related product reference. Confirm the execution independently for the intended task.

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