Yokogawa AAI141-S00

Complete Product Information

AAI141-S00 brings sixteen current loops into one FIO module position with a 10 ms update cycle and direct support for two-wire and four-wire transmitter circuits.

WHAT THIS PRODUCT DOES

Yokogawa AAI141-S00 is a standard 16-channel non-isolated analog input module for 4 to 20 mA field signals.

Product characteristic 1

Acquires sixteen 4 to 20 mA process signals.

Product characteristic 2

Updates the module data every 10 ms.

Product characteristic 3

Accepts both two-wire and four-wire transmitter arrangements.

Product characteristic 4

Uses a non-isolated channel architecture for the documented FIO application.

PRODUCT-PAGE TECHNICAL SNAPSHOT

Input channels	16
Input signal	4 to 20 mA DC
Channel isolation	Non-isolated
Input update period	10 ms
Step response	100 ms
Allowable input	27 mA
Transmitter wiring	2-wire and 4-wire
External connection	Pressure clamp terminal, MIL cable or KS cable

IMPORTANT NOTICE

Preserve the complete AAI141-S00 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

Input channels	16
Input signal	4 to 20 mA DC
Channel isolation	Non-isolated
Input update period	10 ms
Step response	100 ms
Allowable input	27 mA
Transmitter wiring	2-wire and 4-wire
External connection	Pressure clamp terminal, MIL cable or KS cable

FEATURE INTERPRETATION

Product identity

Acquires sixteen 4 to 20 mA process signals.

System role

Updates the module data every 10 ms.

Service context

Accepts both two-wire and four-wire transmitter arrangements.

Return-to-service focus

Uses a non-isolated channel architecture for the documented FIO application.

SIGNAL OR CONTROL PATH

Field signal → **Termination** → **Input module** → **Control database**

AAI141-S00 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 loops does Yokogawa AAI141-S00 acquire?	AAI141-S00 provides sixteen analog input 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.

Process transmitter inputs

Collects flow, pressure, level and temperature current signals.

FIO node modernization

Maintains a sixteen-loop analog input position in the documented node.

Two-wire loop integration

Connects powered transmitters through the approved terminal hardware.

Four-wire instrument inputs

Accepts independently powered 4 to 20 mA sources.

APPLICATION VERIFICATION MAP

Process transmitter inputs	Confirm the documented system position and the required operating function.
FIO node modernization	Compare the restored connection or control path with the approved record.
Two-wire loop integration	Check the physical interface and the retained configuration before startup.
Four-wire instrument inputs	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

Are the channels of Yokogawa AAI141-S00 individually isolated?	No. The AAI141 channel architecture is non-isolated.
How quickly does Yokogawa AAI141-S00 refresh its input data?	Its documented input update period is 10 ms.
What response time should be expected from Yokogawa AAI141-S00?	The documented step response is 100 ms.

Product precautions and questions

EIGHT MODEL-SPECIFIC PRECAUTIONS

01	Confirm the AAI141-S00 marking and assigned node slot.
02	Record all sixteen loop tags and terminal numbers.
03	Place affected process loops in the approved maintenance state.
04	Remove field power before changing pressure-clamp or cable connections.
05	Keep channel commons and shields in their documented positions.
06	Do not copy HART settings to this standard non-HART execution.
07	Inject controlled current points and compare every used channel.
08	Review open-loop diagnostics and controller quality before release.

FREQUENTLY ASKED TECHNICAL QUESTIONS

How many current loops does Yokogawa AAI141-S00 acquire?	AAI141-S00 provides sixteen analog input channels.
Which field signal is assigned to Yokogawa AAI141-S00?	The module accepts 4 to 20 mA DC current inputs.
Are the channels of Yokogawa AAI141-S00 individually isolated?	No. The AAI141 channel architecture is non-isolated.
How quickly does Yokogawa AAI141-S00 refresh its input data?	Its documented input update period is 10 ms.

IMPORTANT NOTICE	Confirm the complete AAI141-S00 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 response time should be expected from Yokogawa AAI141-S00?	The documented step response is 100 ms.
What maximum current may reach Yokogawa AAI141-S00 during checking?	The allowable input is 27 mA; test equipment should remain within the documented limit.
Can Yokogawa AAI141-S00 accept both two-wire and four-wire transmitters?	Yes. The documented wiring arrangements include two-wire and four-wire transmitters.
Which termination choices are documented for Yokogawa AAI141-S00?	Pressure-clamp terminal blocks, MIL connector cabling and the dedicated KS cable arrangement are supported.

CONFIGURATION CONTROL RECORD

Configuration identity	Yokogawa AAI141-S00
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 NFCP501-W15 S2	Related product reference. Review the complete ordering string before selection.
Yokogawa CP451-10 S2	Related product reference. Compare the required interface and system position.
Yokogawa EB401-50 S1	Related product reference. Confirm the execution independently for the intended task.

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