Yokogawa AIP502

Complete Product Information

AIP502 isolates and converts control-network signals between the processor side of a duplexed field control unit and the two V-Net bus connections.

WHAT THIS PRODUCT DOES

Yokogawa AIP502 is a V-Net coupler module used with duplexed processor configurations in legacy CENTUM field control units.

Product characteristic 1

Couples duplexed processor communication to V-Net.

Product characteristic 2

Provides signal isolation and level conversion at the network boundary.

Product characteristic 3

Presents separate connections for V-Net bus 1 and bus 2.

Product characteristic 4

Indicates receive and processor-side transmit activity at the front panel.

PRODUCT-PAGE TECHNICAL SNAPSHOT

Network role	V-Net coupler
Processor arrangement	Duplexed field control unit
Bus connection	V-Net bus 1 and bus 2
Signal function	Isolation and signal-level conversion
Receive indication	RCV status lamp
Transmit indication	Left and right processor transmit status

IMPORTANT NOTICE

Preserve the complete AIP502 identity and verify its documented electrical, network or signal response before release.

APTERPOWER SALES TEAM
WhatsApp / Phone: +86 180 3023 5313
Email: sales13@apterpower.com
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Features and technical data

TECHNICAL DATA SHOWN ON THE PRODUCT PAGE

Network role	V-Net coupler
Processor arrangement	Duplexed field control unit
Bus connection	V-Net bus 1 and bus 2
Signal function	Isolation and signal-level conversion
Receive indication	RCV status lamp
Transmit indication	Left and right processor transmit status

FEATURE INTERPRETATION

Product identity

Couples duplexed processor communication to V-Net.

System role

Provides signal isolation and level conversion at the network boundary.

Service context

Presents separate connections for V-Net bus 1 and bus 2.

Return-to-service focus

Indicates receive and processor-side transmit activity at the front panel.

SIGNAL OR CONTROL PATH

Field device → **Product interface** → **System channel** → **Verified response**

AIP502 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

What network boundary is served by Yokogawa AIP502?	AIP502 couples the field control unit processor side to the V-Net control network.

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.

Duplexed field control units

Connects both processor sides to the redundant V-Net path.

Legacy CENTUM network maintenance

Restores the documented control-network coupler position.

V-Net fault diagnosis

Uses receive and transmit indications to localize a communication break.

Controller retrofit preparation

Preserves bus routing and processor-side connections during planned work.

APPLICATION VERIFICATION MAP

Duplexed field control units	Confirm the documented system position and the required operating function.
Legacy CENTUM network maintenance	Compare the restored connection or control path with the approved record.
V-Net fault diagnosis	Check the physical interface and the retained configuration before startup.
Controller retrofit preparation	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

How are the two V-Net paths presented on Yokogawa AIP502?	The coupler provides separate upper and lower network connections for bus 1 and bus 2.
What does the RCV indication on Yokogawa AIP502 show?	RCV illuminates when the coupler receives a V-Net communication carrier.
Which processor activity can Yokogawa AIP502 display?	Separate transmit indications identify communication from the left and right processor sides.

Product precautions and questions

EIGHT MODEL-SPECIFIC PRECAUTIONS

01	Confirm AIP502 and the installed style before removal.
02	Record upper and lower V-Net cable positions.
03	Label left- and right-processor connections independently.
04	Isolate the station according to the approved maintenance procedure.
05	Protect coaxial connectors and network terminators from contamination.
06	Seat the coupler fully without changing adjacent processor cards.
07	Verify RCV and both processor transmit indications after startup.
08	Confirm controller redundancy and V-Net communication before release.

FREQUENTLY ASKED TECHNICAL QUESTIONS

What network boundary is served by Yokogawa AIP502?	AIP502 couples the field control unit processor side to the V-Net control network.
Why is Yokogawa AIP502 associated with a duplexed processor station?	The documented configuration uses AIP502 with duplexed processor cards so both processor sides can reach V-Net.
How are the two V-Net paths presented on Yokogawa AIP502?	The coupler provides separate upper and lower network connections for bus 1 and bus 2.
What does the RCV indication on Yokogawa AIP502 show?	RCV illuminates when the coupler receives a V-Net communication carrier.

IMPORTANT NOTICE	Confirm the complete AIP502 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

Which processor activity can Yokogawa AIP502 display?	Separate transmit indications identify communication from the left and right processor sides.
What electrical task does Yokogawa AIP502 perform between the processor and V-Net?	It provides signal isolation and converts signal levels at the control-network interface.
Why are two coupler positions checked in a Yokogawa AIP502 installation?	The duplexed field control unit uses the paired network paths to maintain the documented redundant architecture.
Which observations complete commissioning of Yokogawa AIP502?	Normal receive and transmit indications, healthy processor redundancy and stable V-Net communication complete the check.

CONFIGURATION CONTROL RECORD

Configuration identity	Yokogawa AIP502
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 ALF111-S50 S1	Related product reference. Review the complete ordering string before selection.
Yokogawa ET5*B	Related product reference. Compare the required interface and system position.
Yokogawa PW401 S2	Related product reference. Confirm the execution independently for the intended task.

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