

APTER POWER PRODUCT REFERENCE MANUAL

ALF111-S50-S1

ALF111 FOUNDATION Fieldbus Communication Module

ENGINEERING LENS	FOUR-SEGMENT H1 COMMUNICATION AND REDUNDANCY
SYSTEM	Yokogawa CENTUM VP N-IO/FIO
SOURCE CONTROL	Manufacturer-published information only

This original Apter Power manual explains four-segment H1 communication and redundancy using only the manufacturer source named inside the document.

Manufacturer	Yokogawa
Prepared by	Apter Power
Document ID	AP-YOKO-17-ALF111-S50-S1-PM-R1
Revision	R1
Issue date	2026-08-14

APTER POWER SALES TEAM

INDUSTRIAL AUTOMATION PRODUCT SUPPORT

Engineering clarity for four-segment H1 communication and redundancy.

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SCAN FOR PRODUCT & QUOTE
ALF111-S50-S1

1. Product Identity and System Role

ALF111-S50-S1 is a Yokogawa ALF111 FOUNDATION Fieldbus H1 communication-module configuration for CENTUM field control hardware. The ALF111 establishes communication between the field control station and FOUNDATION Fieldbus transmitters, valve positioners, and other H1 devices.

The module interfaces up to four H1 fieldbus segments with the FCS, exchanging cyclic control data, on-demand parameter data, diagnostics, events, and alarms; it can be engineered in a dual-redundant arrangement for higher availability.

Model Configuration

Field	Verified information
Complete model	ALF111-S50-S1
Manufacturer	Yokogawa
Product description	ALF111 FOUNDATION Fieldbus Communication Module
System	Yokogawa CENTUM VP N-IO/FIO

Product-Specific Design Focus

four-segment H1 communication and redundancy

2. Technical Specifications and Evidence Boundary

Only values supported by the named Yokogawa source are stated. Where the complete ordering code is absent from public data, the field is explicitly marked for verification.

Parameter	Verified value
Manufacturer	Yokogawa
Module	ALF111
Protocol	FOUNDATION Fieldbus H1
Fieldbus segments	Up to 4 per module
Configuration	Simplex or dual-redundant as supported
Requested suffix	S50-S1 - verify style code and approvals against the exact order sheet

Evidence Note

Use the complete ALF111-S50-S1 identity. Yokogawa published the eighth edition of the current ALF111 general specification in April 2024. Confirm availability and suffix-specific approvals for S50-S1. Values not published in the cited Yokogawa source are intentionally not inferred.

3. Functions, Applications and Matched Components

Core Functions

- The module interfaces up to four H1 fieldbus segments with the FCS, exchanging cyclic control data, on-demand parameter data, diagnostics, events, and alarms; it can be engineered in a dual-redundant arrangement for higher availability.
- Preserves the documented role within Yokogawa CENTUM VP N-IO/FIO.
- Supports model-specific engineering review without substituting unverified third-party data.

Application Areas

Application	System role
Yokogawa CENTUM VP N-IO/FIO	Maintains the documented four-segment H1 communication and redundancy role in a correctly matched installation.
Process and machine automation	Supports the control, communication, power, safety, measurement, or protection duty stated in the official source for this exact or verified family identity.
Lifecycle-controlled maintenance	Requires complete-code, nameplate, host-system, and project verification before replacement or recommissioning.

Compatible Components

- Yokogawa AFV30, AFV40, A2FV50, A2FV70 field control units listed in current GS
- ANB10 ESB bus node unit or ANB11 optical ESB bus node unit
- Fieldbus power supply, terminators, couplers, barriers, and H1 devices engineered for each segment

Lifecycle Status

Yokogawa published the eighth edition of the current ALF111 general specification in April 2024. Confirm availability and suffix-specific approvals for S50-S1.

4. Installation Precautions

- Match every character of ALF111-S50-S1 to the physical nameplate before work.
- Use the exact Yokogawa manual, wiring drawing, and safety instructions for the installed revision.
- De-energize and apply the required lockout, discharge, ESD, and stored-energy controls before removal.
- Back up firmware, parameters, controller project, calibration, and network settings where applicable.
- Verify supply, signal type, polarity, grounding, shielding, connector pinout, load, and environmental limits.
- Commission with the manufacturer test procedure and record results before returning equipment to service.

DECISION GATE - Verify before installation

Use the complete ALF111-S50-S1 identity. Yokogawa published the eighth edition of the current ALF111 general specification in April 2024. Confirm availability and suffix-specific approvals for S50-S1. Values not published in the cited Yokogawa source are intentionally not inferred.

Controlling records: physical nameplate, current Yokogawa document, and host-system drawings.

5. Official Source and Use Notice

Official manufacturer source

Yokogawa General Specifications GS 33J60G20-01EN, ALF111 FOUNDATION Fieldbus Communication Module for N-IO/FIO.

<https://web-material3.yokogawa.com/GS33J60G20-01EN.pdf>

Apter Power product page

<https://www.apterpower.com/Yokogawa/alf111-s50-s1>

Use Notice

This is an original Apter Power model-specific reference prepared from the Yokogawa source named above. It is not a Yokogawa publication and does not replace the original data sheet, nameplate, certificate, installation drawing, safety instructions, or machine-builder documentation.

ASK FOR QUOTE

For availability and a model-specific quotation, visit www.apterpower.com or contact sales13@apterpower.com.