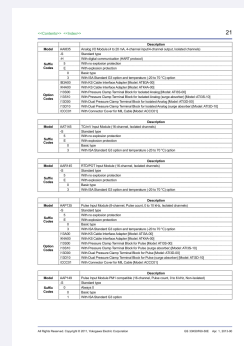


FIELD INSTALLATION QUICK GUIDE

Installation Instructions

Yokogawa AAI835-S00 S2

isolated analog I/O module



PRODUCT	AAI835-S00 S2
SYSTEM	Yokogawa CENTUM VP field I/O
FUNCTION	isolated analog I/O module
STATUS	Verify exact installed equipment

Prepared by Amikon Limited from Yokogawa GS 33K50F60-50E Analog I/O Modules official specification. This quick guide supplements the complete manufacturer documentation, controlled site procedure and safety requirements.

01

CONFIRM THE ORDERED CONFIGURATION

CHANNELS	4 inputs and 4 outputs
SIGNAL	4 to 20 mA DC
CHANNEL ISOLATION	Input/output channels isolated
INPUT LIMIT	25 mA allowable
OUTPUT LOAD	0 to 750 Ω
UPDATE PERIOD	10 ms

02

PREPARATION AND CONNECTION

- Confirm the exact AAI835-S00 S2 suffix and the approved field I/O node configuration.
- Isolate field power and system power using the controlled shutdown procedure.
- Record terminal assignments, channel use, barriers and HART requirements before removal.
- Use electrostatic-discharge controls and protect connector and terminal surfaces.
- Confirm the module dimensions, base unit and keyed insertion position.

CHANNEL DATA AND EXTERNAL DIMENSIONS

Official manufacturer drawings reproduced from Yokogawa GS 33K50F60-50E Analog I/O Modules official specification. Match the complete model and controlled system configuration before applying any connection or setting.

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● **Current Input Module and Current I/O Module (Isolated Channels)**

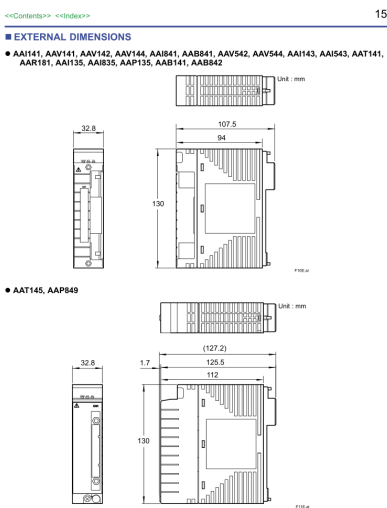
The current input module receives signals of 4 to 20 mA, and the current I/O module sends and receives signals of 4 to 20 mA. These modules are installed between the field and the system as well as in between each channel. They can be used in dual-redundant configuration.

Name		Specifications	
Model	AAI135 (*)	AAI135 (*)	AAI135 (*)
Number of I/O channels	4-channel input, isolated channels	4-channel input/output, isolated channels	4-channel input/output, isolated channels
I/O signal	4 to 20 mA	Input: 4 to 20 mA	Output: 4 to 20 mA
Allowable input current	25 mA	25 mA	25 mA
Withstanding voltage	Between input and system: 300 V AC, for 1 minute Between input channels: 300 V AC, for 1 minute (*)	Between input/output and system: 300 V AC, for 1 minute Between input/output channels: 300 V AC, for 1 minute (*)	Between input/output and system: 300 V AC, for 1 minute Between input/output channels: 300 V AC, for 1 minute (*)
Input resistance	Power ON: 200 Ω (at 20 mA) to 450 Ω (at 4 mA) (*) Power OFF: 100 kΩ or higher	—	—
Allowable load resistance	—	—	5 Ω to 750 Ω (*)
Circuit open detection	—	—	Less than 1.66 mA
Accuracy	±1% μA	Input: ±1% μA	Output: ±4% μA
Data update period	10 ms	—	—
Transmitter power supply	15.0 V or higher (at 20 mA) 25.0 V or less (at 0 mA) (*)	15.0 V or higher (at 20 mA) 25.0 V or less (at 0 mA) (*)	—
Temperature drift	±1% / 0.1 °C	—	—
Maximum current consumption	300 mA (5 V DC), 450 mA (24 V DC)	300 mA (5 V DC), 450 mA (24 V DC)	—
Weight	0.3 kg	—	—
External connection	Phoenix clamp terminal, ML connector cable, dedicated cable (KST)	—	—
HART communication (*)	Available	Available	Available

*) A cover barrier is not allowed to be connected with this module. Use an isolation barrier when the module is used in intrinsically safe applications.
*) When the 5V connector cable is used, the withstanding voltage depends on the electrical specifications of the cable.
*) The module input resistance viewed from the terminals depends on the current strength as calculated as below:
250 Ω + ————— current value ————— mA

*) When this module is used in the ambient temperature of 60 to 70 °C by being installed in a ERT bus node unit that conforms to the temperature environment, the allowable load resistance is 500 to 750 Ω.
*) The voltage is generated between the connecting terminals for 5 weeks before this module. When calculating the minimum operating voltage for transmitters, consider to allow margins for voltage drop in external wiring.
*) When this module is installed to a ERT bus node unit with HART function, the ESDC100 must be installed in 2 or later.

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FIELD SIGNAL CONNECTION AND COMMISSIONING

- Connect four input and four output loops according to the approved channel schedule.
- Maintain the documented polarity and channel isolation for every 4 to 20 mA loop.
- Keep each output load within 0 to 750 ohms and each input below 25 mA.
- Match the digital-communication suffix to the configured field devices where applicable.
- Seat the module fully in its documented base and secure the retaining mechanism.

05

INITIAL SYSTEM CHECKS

- Restore system and field power in the approved sequence.
- Confirm module recognition and verify that no channel diagnostic remains active.
- Inject or observe a known input value and verify the corresponding engineering reading.
- Command each output through a safe range and record the final loop check.

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CONTROLLED DOCUMENTS

Official source	Yokogawa GS 33K50F60-50E Analog I/O Modules official specification
Product record	AAI835-S00 S2
Manufacturer	Yokogawa
Support	INFO@AMIKON.CN