ADV551-P03 S2

Yokogawa / FIO digital output module

Yokogawa ADV551-P03 S2 is an FIO digital output module for configured CENTUM FIO discrete-signal service.

Product identity and system role

ADV551-P03 S2 belongs to the ADV551 digital-output family for Yokogawa FIO. Its 32 isolated current-sink channels transfer configured logic commands to compatible 24 V DC field loads. The load wiring and supply polarity must follow the installed termination arrangement.

The ADV551-P reference supports status output as well as configured pulse-width and time-proportioning operation. A status output responds within 3 ms in the documented base arrangement. Timing behavior and supported channel combinations depend on the selected host node and control project.

Verified technical characteristics

I/O role	Digital output
Reference design	ADV551-P
Channels	32 isolated outputs
Output circuit	Current sink
Applied voltage	24 V DC
External supply range	20.4–26.4 V DC
Load limit	100 mA per channel at 26.4 V
Status response	3 ms maximum

Engineering context

Discrete actuator commands

Switch compatible DC actuators according to the configured FIO sequence.

Timed pulse outputs

Apply a programmed pulse width to field devices whose control specification requires a timed command.

Time-proportioning control

Drive an approved on/off load with the configured duty pattern and suitable output protection.

I/O module restoration

Restore the existing 32-channel output map in a matching FIO node and terminal arrangement.

Configuration and verification

Confirm polarity: Match current-sink wiring and the external DC supply.

Review channel loads: Check each device current against the applicable channel limit.

Protect inductive loads: Use the approved suppression circuit for a relay or solenoid.

Preserve timing: Record pulse-width and time-proportioning settings before replacement.

Selected engineering questions

How should load polarity be checked for ADV551-P03 S2?
ADV551 outputs are current sink. Confirm the external supply and field load wiring against the installed terminal diagram.

What protection is relevant when ADV551-P03 S2 drives a DC relay?
Use the specified suppression diode for an inductive relay load and verify the loop polarity.

Can every channel pattern of ADV551-P03 S2 be used in a redundant pair?
No. Mixed channel-by-channel patterns have host and redundancy restrictions; confirm the selected arrangement in the control project.

How should a pulse output from ADV551-P03 S2 be validated?
Compare the configured pulse duration and observed field response under a safe test condition.

What could cause a commanded output on ADV551-P03 S2 to remain inactive?
Check external 24 V supply, terminal wiring, channel assignment, load condition and host diagnostics.

Does a physical fit prove that ADV551-P03 S2 can replace another ADV551 style?
No. Compare full style marking, host release, terminal assembly and supported configured functions.

Source and application boundary

Yokogawa GS 33J60F70-01EN, Digital I/O Modules for FIO.

ADV551-P family ratings describe the documented base design; confirm style and option applicability to the complete offered marking.

Related product references

Separate product listings for project review; confirm each order code and system fit independently.

Yokogawa VI702 S1	Yokogawa ADV161-P00 S2
Yokogawa AAT141-S00 S2	Yokogawa AAT141-S00

Apter Power | Technical enquiry

sales13@apterpower.com | +86 18030235313

Send the complete model and installed-system details when requesting a quotation.