SNAP-PAC-S1

01 / Installed system and risk controls

Opto 22 SNAP-PAC-S1 is a standalone programmable automation controller for Ethernet and serial I/O systems. It executes PAC Control strategies while separate SNAP PAC brains or compatible serial units provide the field I/O connections.

Rack and field boundary

SNAP-PAC-S1 runs the strategy and communicates with separate I/O units over Ethernet or a supported serial network.

Before returning the system to service

Back up the strategy

Export the running PAC Control strategy and configuration before removing the original controller.

Check power and serial range

Verify the unit serial number before applying the 8–32 VDC limit; older S1 units require the 8–24 VDC range.

Preserve both networks

Record each Ethernet port's IP address, subnet and connected switch; accidental cross-connection can disrupt I/O.

Check serial pinout

Identify RS-232 port 0, port 1 and the two-wire RS-485 terminals separately before reconnecting cables.

Record the installed configuration

Baseline

Record the installed serial number, firmware, loader, network addresses and strategy backup before disconnecting the controller.

Network plan

Keep both Ethernet subnets and switch connections identified to prevent unintended bridging during reinstallation.

Serial plan

Map RS-232 port 0, port 1 and RS-485 station wiring to the existing project and cable labels.

SNAP-PAC-S1

02 / Commission and hand over

How can the two Ethernet ports of SNAP-PAC-S1 be used safely?

Give each interface its own IP address and subnet and map each switch connection to the original design. Confirm whether the site uses separate control and enterprise paths or PAC Project Professional link redundancy before moving cables.

Why does the serial number matter for SNAP-PAC-S1 power selection?

The Opto 22 sheet states 8–32 VDC for current S1 units but limits serial numbers below 500,000 to 8–24 VDC. Read the offered unit label and verify the installed supply before energizing.

Which SNAP-PAC-S1 serial port can support a PPP modem?

The manufacturer describes PPP on RS-232 port 0. Record the original DB-9 cable and port configuration, then check the controller project before restoring a modem or substituting another serial device.

What must be retained when replacing SNAP-PAC-S1 in a live system?

Archive the PAC Control strategy, firmware and loader versions, both Ethernet settings, serial port roles, I/O-unit list and any network security settings. Restore only after an exact-unit compatibility review.

Can SNAP-PAC-S1 use a RESTful API regardless of firmware?

No. Opto 22 specifies firmware R9.5a or later for the built-in RESTful API. Verify the actual firmware and PAC Project configuration rather than assuming a unit has the feature from its part number alone.

How is legacy RS-485 I/O integrated with SNAP-PAC-S1?

Use the two-wire RS-485 port for supported mistic or SNAP PAC serial I/O units and the appropriate PAC Project Professional strategy features. Check segment wiring, station addresses and termination against the existing network.

Close-out evidence

Prove strategy startup, Ethernet and serial communications, representative I/O and the planned fail-safe response; retain the as-left configuration.

Technical basis: Opto 22 SNAP PAC S-Series Controllers, Form 1584-260513, pp. 1–5 and 10.

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