SNAP B3000 BRAIN

Serial SNAP I/O Brain

A field-work document for evidence capture, controlled installation, commissioning and handover. Product specifications remain in the separate View PDF and manufacturer excerpt.

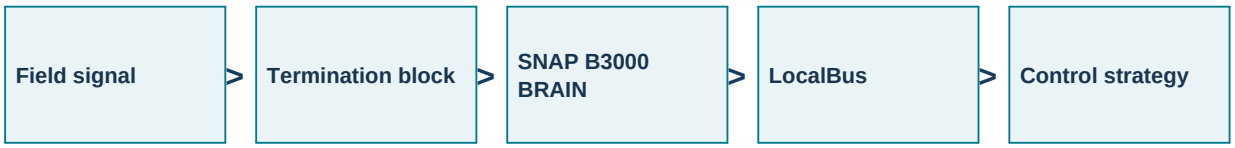
SNAP B3000 BRAIN discrete-I/O evidence

Pre-work evidence pack

Exact supplied marking	SNAP B3000 BRAIN — photograph every character and label
Installed asset reference	Machine, bearing, channel, cabinet and drawing identifiers
Mechanical witness record	Insertion datum, locknut or bracket position, connector orientation and route
Companion identities	Probe, cable, sensor, interface, monitor or terminal designations as applicable
As-found electrical record	Static bias, gap, continuity or channel state captured by the approved method
Work-control basis	Isolation, permit, site procedure, applicable drawing and responsible person

Installed relationship to preserve

Field device, terminal block, input card, LocalBus and configured control strategy



Evidence-capture instruction

Record slot, terminal numbers, signal or contact state, field power, channel range, HART identity where used and carrier keying.

Readiness gate

Identity gate	Exact item and installed record agree before work begins.
Interface gate	Mechanical and electrical endpoints are identified and accessible.
Safety gate	Approved isolation and stored-energy controls are active.
Evidence gate	As-found photographs and readings are retained.

Terminal map and field-state readiness

Controlled removal sequence

01 Review	Confirm the work pack, exact identity and approved isolation boundary.
02 Capture	Record slot, terminal numbers, signal or contact state, field power, channel range, HART identity where used and carrier keying.
03 Mark	Apply temporary labels and witness marks that do not damage the component.
04 Disconnect	Isolate field power as required, label the terminal block and retain all configured channel assignments before card removal.

05 Protect	Cap open connections, protect sensing or contact surfaces and retain removed hardware by location.
06 Compare	Place the removed and offered items side by side; resolve every difference before installation.

Handling controls

No cable pulling

Handle connector bodies and supported component sections; never use a lead or armor as a lifting point.

No uncontrolled rotation

Prevent twisting through connectors, ferrules, probe leads and terminal lugs.

Clean interfaces only

Keep open contacts and sensing faces dry, covered and free of metal particles or process residue.

Preserve the route

Retain clamps, bend locations, separation and strain relief shown by the approved installation.

Stop-work triggers

Unresolved identity difference	Do not substitute an adjacent model or option code.
Damaged interface	Quarantine damaged threads, connectors, armor, cable or protector parts.
Missing baseline	Obtain an approved comparison record before altering the arrangement.

Controlled SNAP B3000 BRAIN module exchange

Installation sequence

01 Prepare	Clean the work area and verify all retained hardware and companion identities.
02 Position	Inspect carrier contacts, match keying, seat the exact card and restore field circuits in a controlled sequence.
03 Support	Restore clamps, strain relief, route separation and mechanical protection before energization.
04 Inspect	Confirm no trapped contamination, cable torsion, side load or unsupported connector weight.
05 Static test	Module health, field power and representative channel values or states agree with the as-found record.
06 Controlled energization	Follow the approved staged procedure and stop on unexpected bias, continuity or channel state.
07 Functional proof	Signal movement or contact transitions reach the correct configured tags without unexpected diagnostics.
08 Record	Retain final photographs, readings, deviations, approval and release responsibility.

Commissioning worksheet

Installed identity	SNAP B3000 BRAIN / photograph reference: _____
Companion identities	_____
As-found static value	_____ Test condition: _____
As-left static value	_____ Test condition: _____
Functional result	Pass / Hold Evidence reference: _____
Deviation disposition	None / Approved reference: _____

Model-path fault isolation

Channel reads out of range	Check field source, polarity, terminal execution, range and wiring before card substitution.
Module is healthy but tag is wrong	Compare channel assignment, terminal map and downloaded controller configuration.
HART device is not visible	Verify loop current, scan enablement, device wiring and supported termination arrangement.

State sequence and process handover

Acceptance record

Identity accepted	Complete supplied marking agrees with the released work order and photographs.
Mechanical acceptance	Installed datum, route, support, connector condition and protection are approved.
Electrical acceptance	Module health, field power and representative channel values or states agree with the as-found record.
Functional acceptance	Signal movement or contact transitions reach the correct configured tags without unexpected diagnostics.
Documentation accepted	As-found and as-left evidence, deviations and approval basis are retained.

Handover package

Photographs	Complete marking, installed position, connection path and final protection
Measurements	Static value, continuity or insulation result and representative functional proof
Configuration record	Companion identities, channel or terminal assignment and approved drawing revision
Release signatures	Technician, reviewer, operations owner and date

Verified related product references

Recommended product	Opto 22 SNAP-LCM4 M4SENET-100
Recommended product	Opto 22 SNAP-PS5
Recommended product	Opto 22 SNAP-LCSX-PLUS
Recommended product	Opto 22 001818K AC24 AT
Recommended product	Opto 22 SNAP-AIMA-4
Recommended product	Opto 22 SNAP-AIV-8

Discuss the exact marking and installed relationship with Apter Power.
sales13@apterpower.com | +86 18030235313