Foxboro CP30

Complete Product Information

Foxboro CP30 executes regulatory, logic, timing and sequential control while coordinating Fieldbus I/O, alarms and data acquisition.

WHAT THIS PRODUCT DOES

Foxboro CP30 is a control processor 30 for control execution and Fieldbus data. It operates with the assigned Nodebus and Fieldbus connections and provides one processor module or an optional fault-tolerant pair.

Product characteristic 1

Provides one processor module or an optional fault-tolerant pair for its control processor 30 function.

Product characteristic 2

Handles control execution and Fieldbus data through the documented Foxboro system path.

Product characteristic 3

Works with the assigned Nodebus and Fieldbus connections.

Product characteristic 4

A recessed reset control permits a controlled reboot without removing the module.

PRODUCT-PAGE TECHNICAL SNAPSHOT

Control functions	Regulatory, logic, timing and sequential control
I/O connections	FBMs, FBCs and supported migration integrators
Local Fieldbus	Up to 24 FBMs over a redundant bus
Extended Fieldbus	Up to 64 FBMs through Fieldbus Isolators

IMPORTANT NOTICE

Use CP30 only with the assigned Nodebus and Fieldbus connections; verify every interface and the controlled project configuration before energizing or pressurizing the subsystem.

APTERPOWER SALES TEAM
WhatsApp / Phone: +86 180 3023 5313
Email: sales13@apterpower.com
Scan the approved WhatsApp code for model-specific support.

Features and technical data

TECHNICAL DATA SHOWN ON THE PRODUCT PAGE

Control functions	Regulatory, logic, timing and sequential control
I/O connections	FBMs, FBCs and supported migration integrators
Local Fieldbus	Up to 24 FBMs over a redundant bus
Extended Fieldbus	Up to 64 FBMs through Fieldbus Isolators
Diagnostics	Power-up, run-time/watchdog and off-line tests

FEATURE INTERPRETATION

Product identity

Provides one processor module or an optional fault-tolerant pair for its control processor 30 function.

System role

Handles control execution and Fieldbus data through the documented Foxboro system path.

Service context

Works with the assigned Nodebus and Fieldbus connections.

Return-to-service focus

A recessed reset control permits a controlled reboot without removing the module.

SIGNAL OR CONTROL PATH

Fieldbus I/O → **Foxboro processor** → **Control execution** → **Nodebus services**

The control processor 30 belongs in the controlled Foxboro architecture and works with the assigned Nodebus and Fieldbus connections. Its mating hardware, wiring, database configuration and final response must be checked together before release.

PRODUCT-PAGE TECHNICAL QUESTIONS

Which control functions run in Foxboro CP30?	It performs regulatory, logic, timing and sequential control.
Which I/O families can CP30 coordinate?	The processor supports Fieldbus Modules, Fieldbus Cluster I/O and the listed migration-integrator families.
How many FBMs can connect on the local Fieldbus?	The redundant local bus supports up to 24 FBMs, excluding expansion modules.

Common applications

The application groups below reproduce the model-specific uses presented on the product page and connect each use to a practical verification point.

System maintenance

Restores the documented control processor 30 function in an existing Foxboro control system.

Signal-path service

Supports controlled testing of control execution and Fieldbus data at the assigned system position.

Planned replacement

Provides an exact-identity replacement path after the assigned Nodebus and Fieldbus connections has been verified.

Commissioning

Allows the responsible engineer to prove configuration, diagnostics and response for one processor module or an optional fault-tolerant pair.

APPLICATION VERIFICATION MAP

System maintenance	Confirm the documented system position and the required operating function.
Signal-path service	Compare the restored connection or control path with the approved record.
Planned replacement	Check the physical interface and the retained configuration before startup.
Commissioning	Record diagnostics and the final controlled response before release.

INFORMATION CARRIED INTO THE WORK RECORD

Identity record

Complete marking and assigned system position.

Connection record

Connector, conductor and interface arrangement as found.

Configuration record

Controlled settings, application data and option state.

Acceptance record

Observed status, response and release decision.

IMPORTANT NOTICE

Use the complete product identifier for every application review; a related product link is not evidence of interchangeability.

APPLICATION QUESTIONS

How many FBMs can connect on the local Fieldbus?	The redundant local bus supports up to 24 FBMs, excluding expansion modules.
What changes in a fault-tolerant CP30 configuration?	Two processor modules operate in parallel with separate Nodebus and Fieldbus connections.
Which diagnostics run on the processor?	Power-up self-checks, continuous run-time/watchdog checks and off-line diagnostics are provided.

Product precautions and questions

EIGHT MODEL-SPECIFIC PRECAUTIONS

01	Match the complete CP30 marking to the work order and installed position before removal.
02	Confirm the assigned Nodebus and Fieldbus connections before disconnecting any interface.
03	Keep control execution and Fieldbus data within the documented electrical or pneumatic range.
04	Record terminal designations, polarity, common, shield and cable routing before disconnection.
05	Inspect mounting, connector keying, terminal condition and retention hardware before installation.
06	Restore the controlled database, range, alarm, filter and fail-state settings before energization.
07	Review local indicators and controller diagnostics during the controlled startup sequence.
08	Prove the intended response across one processor module or an optional fault-tolerant pair and record the acceptance result before release.

FREQUENTLY ASKED TECHNICAL QUESTIONS

Which control functions run in Foxboro CP30?	It performs regulatory, logic, timing and sequential control.
Which I/O families can CP30 coordinate?	The processor supports Fieldbus Modules, Fieldbus Cluster I/O and the listed migration-integrator families.
How many FBMs can connect on the local Fieldbus?	The redundant local bus supports up to 24 FBMs, excluding expansion modules.
What changes in a fault-tolerant CP30 configuration?	Two processor modules operate in parallel with separate Nodebus and Fieldbus connections.

IMPORTANT NOTICE	Use CP30 only with the assigned Nodebus and Fieldbus connections; verify every interface and the controlled project configuration before energizing or pressurizing the subsystem.

RELEASE CHECKLIST

Identity accepted	The complete product marking and assigned system position agree.
Interfaces accepted	Connections, retention and controlled configuration match the recorded condition.
Response accepted	Diagnostics and the intended technical response have been documented.

FAQ, source record and related models

ADDITIONAL TECHNICAL QUESTIONS

Which diagnostics run on the processor?	Power-up self-checks, continuous run-time/watchdog checks and off-line diagnostics are provided.
How is a controlled reboot initiated?	Use the recessed front reset control according to the approved operating procedure.
What must be preserved before processor replacement?	Record the station identity, Nodebus and Fieldbus paths, control configuration and fault-tolerant pairing.
What demonstrates a successful return to service?	Confirm processor status, I/O communication, alarm handling and execution of the assigned control blocks.

MANUFACTURER EVIDENCE RECORD

Manufacturer source	Invensys, I/A Series Hardware Control Processor 30, PSS 21H-1B2 B3.
Evidence boundary	Technical statements are limited to the identified product or applicable manufacturer family.
Selection control	Use the complete ordering string and verify the installed system before purchase or installation.

RELATED MODELS ON APTERPOWER

Bently Nevada 24701-28-05-XX-014-04-XX MOD:323933-40-02	Related product reference. Review the complete ordering string before selection.
Bently Nevada 129716-XXX-040-15 MOD:166797-0133	Related product reference. Compare the required interface and system position.
Bently Nevada AM3100T2-Z2-00	Related product reference. Confirm the execution independently for the intended task.

APTERPOWER SALES TEAM
WhatsApp / Phone: +86 180 3023 5313
Email: sales13@apterpower.com
Scan the approved WhatsApp code for model-specific support.