Invensys FBM10/15

Complete Product Information

FBM10/15 denotes a Foxboro I/A Series FBM10 main module with one FBM15 expansion module. Each module provides eight 120 Vac monitored inputs and eight 120 Vac switched outputs, giving the combined pair sixteen inputs and sixteen outputs when engineered together.

01 Product identity and verified data

Complete model	FBM10/15
Product type	Foxboro I/A Series 120 Vac Digital I/O Module Set
Manufacturer	Invensys
Technical source	Foxboro Product Specification PSS 21H-2C9 B4
Input channels per module	8
Output channels per module	8
Combined pair inputs	16
Combined pair outputs	16
Input ON-state	79 to 132 Vac
Input OFF-state	0 to 20 Vac
Input filter selections	4, 8, 16 or 32 ms
Output voltage	79 to 132 Vac; 120 Vac nominal, 50/60 Hz

Engineering purpose

The FBM10 connects directly to the redundant Fieldbus and can support one FBM15 expansion, which depends on the main module for Fieldbus access.

Selected order-code snapshot

Pair architecture	FBM10 main attaches to the redundant Fieldbus and supports one Fieldbus-dependent FBM15 expansion
I/O capacity	Eight 120 Vac inputs and eight 120 Vac outputs per module; sixteen of each for the engineered pair
Output boundary	2 A per channel and 12 A per module with defined short-duration inrush limits

02 Technical capability and engineering overview

Output current	2 A maximum per channel; 12 A maximum per module
Output inrush	24 A peak 10 ms; 12 A rms 20 ms; 3.5 A rms 1 s
Module-pair supply	26 to 42 Vdc redundant
Power, main only	7 W maximum

Power, main plus expansion	11 W maximum
Channel isolation	1,250 Vac for one minute channel-to-earth or channel-to-channel
Operating temperature	0 to 60 deg C
Operating humidity	5 to 95% noncondensing
Published module mass	1 kg each

Evidence boundary

FBM10 main and FBM15 expansion module functions, 120 Vac channel data, power, environment and mounting specifications; manufacturer contact page is excluded.

Engineering overview

The FBM10 executes the Digital I/O or Ladder Logic application for itself and the attached expansion. The FBM15 must not be treated as an independent Fieldbus node.

Input filtering is selected per module, while output fail-safe, sustained/momentary behavior and pulse interval are configured per channel. Preserve these settings before changing either module.

An overloaded output opens for approximately 64.5 line cycles and retries; currents above 50 A can damage the module, so the connected load and external fusing must be verified.

Application map

120 Vac field-status monitoring

Use the documented ON/OFF windows to monitor eight mains-level contacts per module.

120 Vac actuator switching

Switch relays or solenoids within the 2 A channel and 12 A module limits.

Main-plus-expansion I/O

Connect one FBM15 to the supporting FBM10 for a coordinated 16-input/16-output station.

Ladder Logic execution

Restore the approved Digital I/O or Ladder Logic program, filters, fail-safe and momentary-output settings.

03 System interpretation and selection boundaries

Product boundary	Apply the listed facts to FBM10/15 and the documented Foxboro I/A Series FBM10 main and FBM15 expansion modules context only.
Interface boundary	Connector, terminal, bus, cable and companion-device assignments must match the installed drawing.
Electrical boundary	Use exact-model values only; system-level ratings remain conditional on the complete installed configuration.
Configuration boundary	Switches, jumpers, addresses, firmware and project settings must be reconciled before energization.
Diagnostic boundary	Interpret indicators and fault states together with measured inputs, outputs and host-system status.
Acceptance rule	Use the approved system baseline and maintenance procedure for the final as-left decision.

Installed-system context

Preserve the FBM10 main-to-Fieldbus connection, FBM15 expansion link, 26-42 Vdc module supply and every 120 Vac termination assignment.

04 Lifecycle, offered scope and related references

Lifecycle status

Installed-system identity	FBM10/15 is a legacy Foxboro I/A Series main-plus-expansion pair documented by PSS 21H-2C9 B4.

Support boundary	Ongoing use depends on the installed I/A Series Fieldbus, mounting structure, termination assembly and application program.
Replacement rule	Match main/expansion role, 120 Vac I/O, termination type, filters, output modes and enclosure architecture.

Available unit details

Supply scope	One FBM10 main plus one FBM15 expansion when quoted as FBM10/15; termination assemblies and mounting structure are separate unless listed.
Unit evidence	Request both module labels, expansion interconnect, termination-block type and enclosure-position photographs.
Program evidence	Keep the Digital I/O/Ladder Logic revision and all filter, fail-safe and pulse settings with the pair.

Source and applicability record

Verified source	Foxboro Product Specification PSS 21H-2C9 B4
Applicability boundary	FBM10 main and FBM15 expansion module functions, 120 Vac channel data, power, environment and mounting specifications; manufacturer contact page is excluded.
Product family	Foxboro I/A Series FBM10 main and FBM15 expansion modules

Additional related product references

Related product	Emerson 5X00790G01
Related product	General Electric 8121-DI-DC-01
Related product	ABB PM5670-2ETH 1SAP151000R0278
Related product	Invensys FBM10/15

Product-specific purchasing decisions

What does FBM10/15 include?	It denotes an FBM10 Fieldbus main module and one FBM15 expansion module.

Model-specific release records

Pair record	Capture FBM10 and FBM15 labels, expansion connection and mounting positions.
Termination record	Record connector-block type and all 120 Vac field assignments.
Functional record	Record Fieldbus status and sixteen-input/sixteen-output proof.

Engineering contact

Discuss the exact marking and installed application with Apter Power.
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