Motorola FRN1420A

Technical Reference | exact-model engineering dossier

Motorola FRN1420A is identified in the Motorola price book as a 16-discrete-input MOSCAD module for dry-contact status acquisition in an RTU.

Exact offered identity	FRN1420A
Engineering role	MOSCAD Sixteen-Channel Digital Input Module
Installed-system reference	Motorola MOSCAD RTU digital input platform

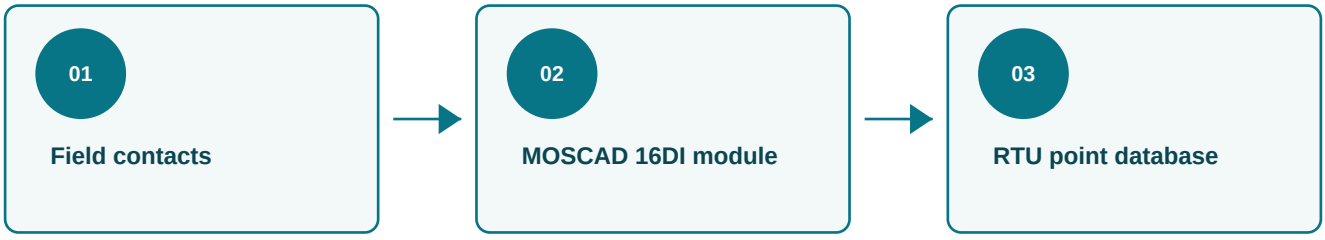
Functional identity

The Motorola price book identifies exact FRN1420A as a 16-discrete-input MOSCAD module. The related Motorola 16DI specification uses base field-install code FRN1420; detailed functions are stated as platform-family information pending the installed A-suffix revision.

Engineering decision points

Match the complete marking	Include FRN1420A and every visible revision or serial identity in your enquiry. Keep the same complete reference on the quotation.
Check the offered item before ordering	Request available label and connector photos. Have your maintenance team compare the offered FRN1420A with the installed equipment and applicable Motorola documentation.

Engineering path



Source basis

Motorola MOSCAD 16DI Digital Input Module specification, R3-11-83; Motorola 2005 U.S. Price Book, FRN1420A entry

02 System position and boundaries

Equipment status

Map switches or relay contacts to the RTU point database for operating-state monitoring.

Alarm detection

Use contact changes as application inputs for approved alarm or interlock logic.

Event history

Where the RTU configuration supports it, record time-tagged input changes for sequence review.

Pulse count duties

Apply supported counter channels only after confirming the exact A-suffix module and field pulse characteristics.

Installed system

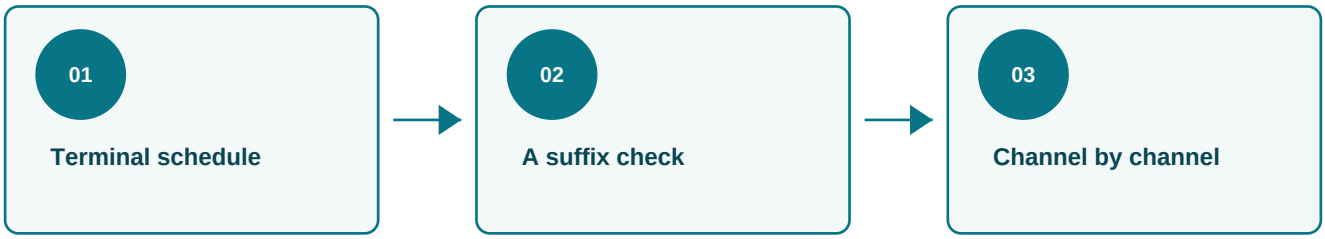
Confirm the complete FRN1420A marking, terminal block and RTU motherboard compatibility in the offer; field contacts and application program are separate.

FRN1420A is the exact catalog code. Confirm its physical revision and terminal arrangement before applying base FRN1420 wiring details.

03 Verified technical data

Exact catalog identity	16 discrete input module for MOSCAD
Input purpose	Dry-contact status sensing in 16DI family
Counter capability	Two dedicated high-speed inputs in 16DI family
Low-speed count	Application-controlled use of digital inputs in 16DI family
Event recording	Time tagging in 16DI family
Isolation	Optically isolated input paths in 16DI family
Module connection	Plugs into MOSCAD RTU motherboard
Field wiring	Removable front connectors in 16DI family
Status indication	Input and module diagnostics in 16DI family

Review sequence



04 Integration and diagnostic review

A-suffix identity

FRN1420A is the exact catalog code. Confirm its physical revision and terminal arrangement before applying base FRN1420 wiring details.

Signal type

The 16DI family senses contact closure states; it does not source an analog measurement or drive an output load.

Power isolation

De-energize the RTU and isolate field circuits before removing the module.

Revision match

Compare the A-suffix label, connector layout and motherboard position with the installed unit.

Acceptance sequence

STEP	ACTION	ACCEPTANCE
01	Point database	Preserve channel mapping, alarm rules and counter/time-tag options in the RTU program.
02	Channel proof	Exercise every used contact, observe local indication and verify the corresponding host point and event behavior.
03	Record the functional result	Operate each used field contact and confirm the matching RTU point, alarm or counter event; record the channel-by-channel result against the original schedule.

05 Engineering questions and source record

How should FRN1420A be matched to a MOSCAD RTU slot?	Compare the exact A-suffix marking, motherboard position, terminal-block style and installed RTU configuration before moving the module.
What signal should be connected to FRN1420A inputs?	The catalog identifies a discrete-input module and the related 16DI architecture uses dry-contact closures. Check the exact unit wiring before applying field power.

Why can an FRN1420A input LED change without a host alarm?	The physical contact can be seen by the module while the RTU point map, scan or application logic is wrong. Trace the point from terminal through CPU to the alarm rule.
How should shared commons be handled when replacing FRN1420A?	Document each conductor and common return by terminal; transfer the block only after the A-suffix connector assignment is verified.
When may FRN1420A be used for pulse counting?	The related 16DI platform supports counter functions, but the exact A-suffix hardware and RTU program must be checked against pulse rate and channel wiring first.
How does time tagging on FRN1420A depend on the RTU?	Event time meaning comes from the related 16DI module capability together with CPU and application setup. Confirm clock synchronization and recorded event sequence in the installed system.

Document identity

Apter Power technical reference based on Motorola MOSCAD 16DI Digital Input Module specification, R3-11-83; Motorola 2005 U.S. Price Book, FRN1420A entry. The exact offered code and installed revision govern applicability.

Discuss the complete model and fitted revision with Apter Power.
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Other Motorola references

Catalog navigation only; confirm each complete model for its own installation.

Motorola MVME133A-20	View product reference
Motorola MVME172-333	View product reference
Motorola MVME2304 64-W5206C01B	View product reference