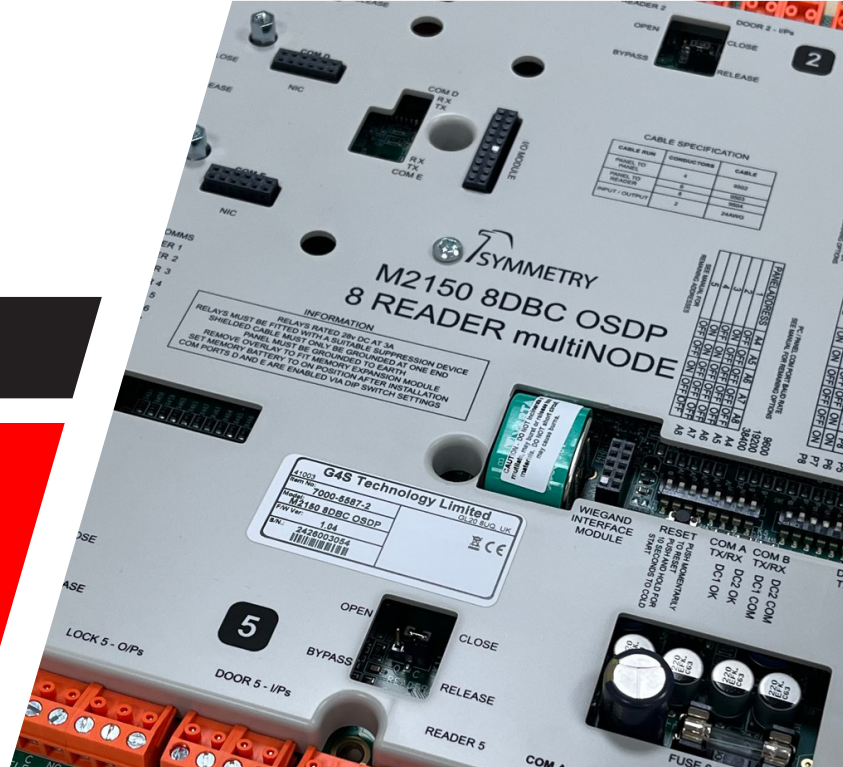


D A T A S H E E T

Symmetry™

MultiNODE M2150 Intelligent Controller vINTL



Key Features

Modular mix and match configuration

Connects to Symmetry management software via LAN, WAN, RS232 or modem

Each M2150 can control up to 16 doors and readers

Manages 20,000 card holders and 65,000 offline transactions (expandable to 250,000 cardholders)

Connect smart card, proximity or legacy magstripe readers using MultiNODE Current Loop Protocol (MCLP) or OSDP (OSDP panels do not support MCLP)

Wiegand and Biometric reader support using optional WIM

Elevator model controls up to 64 floors

Wireless or secure AES encrypted communication options

Available with or without enclosure and power supply

Product Overview

The multiNODE M2150 range of controllers provides distributed intelligence for your access control system and ensures complete system security, resilience and reliability. When integrated with Symmetry security management software, the M2150 controller range delivers a seamless security management system to protect all types of buildings while maintaining a low cost of ownership.

At the core of a standard access control installation is the M2150 Database Controller (DBC), an intelligent controller with built in database and support for 4 or 8 card readers. Expansion of the system is simple using remote Door Controllers (DC) that offer the functionality of the DBC without a database onboard, up to a maximum of 16 doors.

Expansion beyond 16 doors is achieved by installing additional DBCs and DCs as required, providing solutions that can scale up to many thousands of doors. Each DBC can manage 20,000 cardholders, and this can be increased to a maximum of 250,000 using plug-in memory modules.

The M2150 DBU offers the ultimate in flexibility and system design architecture by delivering database intelligence with connectivity to remote door controllers.

The M2150 range of controllers provides a resilient and fault tolerant access control solution that will continue to operate in the unlikely event of database server or network infrastructure failure.

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Using additional input or output modules and controllers the M2150 range can be extended to manage a number of applications, including alarm monitoring.

The M2150 OSDP door controller is available only in an 8 door option and requires Symmetry Access Control software

M2150 Database Unit with Integrated Door Controller (DBC)

Each M2150 controller supports 20,000 cardholders (expandable to 250,000) and up to 16 card readers with the addition of optional door controllers. Includes integrated RS232 port. Door input and output controllers connect using RS485. Optional network interface modules are able to provide LAN or wireless access. See price list for models including enclosure and 3.5A 12VDC power supply (20VAC or 24VDC input). Also available with fitted transformer. See price list for details. A handgeometry variant is available.

Reference	Model	Doors	Enclosure	Size
M2150-4DBC	4DBC	4	Board only	W: 11.03 in (280 mm), H: 10.24 in (260 mm)
M2150-8DBC	8DBC	8	Board only	W: 11.03 in (280 mm), H: 10.24 in (260 mm)
M2150-8DBC-OSDP	8DBC-OSDP	8	Board only	W: 11.03 in (280 mm), H: 10.24 in (260 mm)

M2150 Database Unit (DBU)

M2150 database unit supports 20,000 cardholders (expandable to 250,000) and up to 16 card readers with separate door controllers. Includes integrated RS232 port. Door input and output controllers connect using RS485. Optional network interface modules are able to provide LAN or wireless access. An integrated RS232 port is provided. Board only, requires enclosure and power supply.

NOTE: The EN-DBU is also available - See separate datasheet

Reference	Model	Doors	Enclosure	Size
M2150-DBU	DBU		Board only	W: 9.4 5in (240 mm), H: 6.3 in (160 mm)



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M2150 Door Controller (DC)

Extends DBU and DBC to support up to 16 readers. Connects to DBU, 2DBC, 4DBC and 8DBC via RS485. See price list for models including enclosure and 3.5A 12V DC power supply (20V AC or 24V DC input). Also available with fitted transformer. See price list for details.

Reference	Model	Doors	Enclosure	Size
M2150-4DC	4DC	4	Board only	W: 6.89 in (175 mm), H: 12.6 in (320 mm)
M2150-8DC	8DC	8	Board only	W: 11.03 in (280 mm), H: 10.24 in (260 mm)
M2150-8DC-OSDP	8DC-OSDP	8	Board only	W: 11.03 in (280 mm), H: 10.24 in (260 mm)

Network Interface Modules

Plug-in module that connects to the DBU, 2DBC, 4DBC and 8DBC to provide an IP network interface connection.

Reference	Description
MN-NIC-5	Provides a 10/100 Mbps network connection for M2150 DBU, 2DBC, 4DBC, 8DBC and 8DBC-OSDP.
MN-NIC-5-ENC*	Provides a 10/100Mbps network connection for M2150 DBU, 2DBC, 4DBC, 8DBC and 8DBC-OSDP. Recommended for improved security, it replaces both MN-NIC-4 and MN-NIC-4-ENC. <i>Note: TLS 1.2 and encryption capable, may require an export license for supply outside of the USA which may delay shipment.</i>



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Database Unit with Integrated Elevator Interface

Each M2150 elevator controller supports 20,000 cardholders (expandable to 250,000) and up to 64 floors, includes enclosure and power supply.

Reference	Elevators/Floors	Size
M2150-ELEV	1 elevator 32 floors 2 elevators 16 floors	W: 20 in (510 mm), H: 20 in (510 mm), D: 6.8 in (172 mm)
M2150-ELEV-EXT-S	1 elevator 64 floors 2 elevators 32 floors 4 elevators 16 floors	W: 20 in (510 mm), H: 20 in (510 mm), D: 6.8 in (172 mm) Extends to M2150-ELEV to support up to 64 floors or 4 elevators. (Add on extension for the M2150-ELEV, which must be ordered separately.)

Input and Output Modules

Plug-in input and output modules mount onto the DBC and DC to provide additional inputs and outputs. The 2DBC, 2DC, 8DBC-OSDP and 8DC-OSDP support one module. The 4DBC and 4DC support two modules.

Reference	Inputs	Outputs	Size
M2150-AC8/4	8	4	W: 4.53 in (115 mm), H: 3.23 in (82 mm)
M2150-OC4/8	4	8	W: 4.53 in (115 mm), H: 3.23 in (82 mm)

Input and Output Controllers

Input and output controllers connect to the DBU, 2DBC, 4DBC, 8DBC and 8DBC-OSDP via RS485 to provide additional I/O. Each input or output controller added to an M2150 reduces the maximum number of readers that the controller can support by four.

Reference	Inputs	Outputs	Enclosures	Size
M2150-AC24/4	24	4	Board only	W: 6.89 in (175 mm), H: 12.6 in (320mm)
M2150-OC4/24	4	24	Board only	W: 6.89 in (175 mm), H: 12.6 in (320 mm)

*Requires export control licensing when exported to certain countries

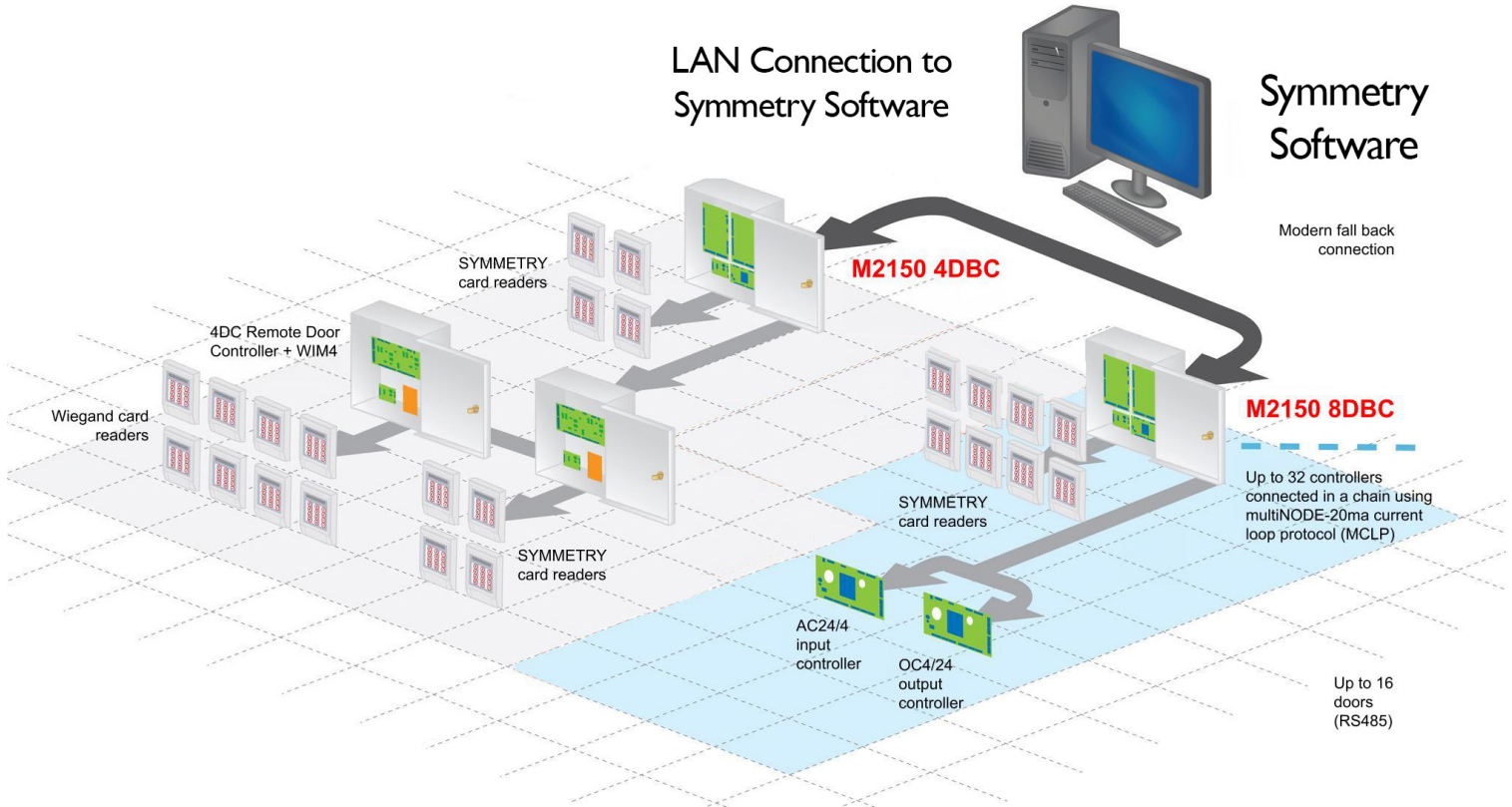
*6A power supply (18VAC or 24VDC input)

** Not available in North America

Note: There are no M2150-OSDP elevator options at this time.



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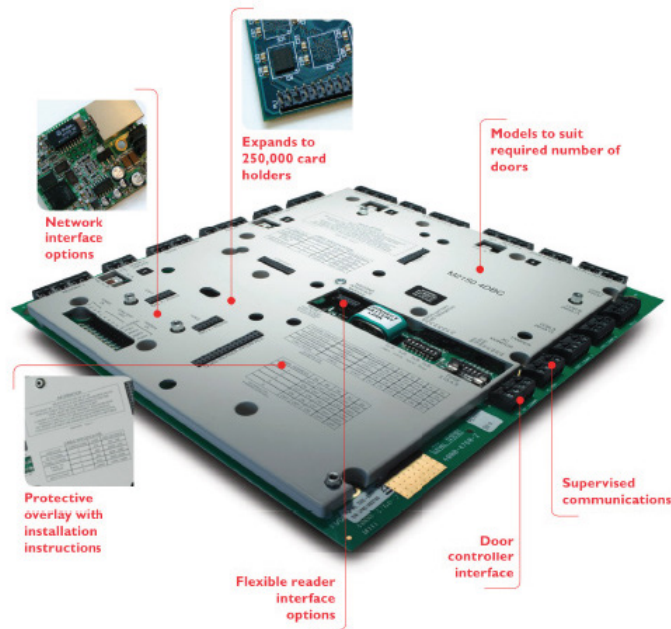


Enclosures

MN-CAB3A	Symmetry CAB3A Enclosure - Lock, Tamper, Space for PSU-KIT. Supports: DBU & QTY 1x AC24/4, OC4/24, 4DC, 2DC or QTY 2x 2DC, 4DC, AC24/4, OC4/24 or QTY: 1x 8DBC, 8DC, 4DBC, 2DBC (WHD 16.5x21.7x3.7)*
MN-CAB3A+PSUKIT	Symmetry CAB3A Enclosure Kit - Lock, Tamper, AC Mon., PSU-KIT. Supports: DBU & QTY 1x AC24/4, OC4/24, 4DC, 2DC or QTY 2x 2DC, 4DC, AC24/4, OC4/24 or QTY: 1x 8DBC, 8DC, 4DBC, 2DBC (WHD 16.5x21.7x3.7)*
MN-CAB4A	Symmetry CAB4A Enclosure - Lock, Tamper, Space for PSU-KIT. Supports: DBU & QTY 1x AC24/4, OC4/24, 4DC, 2DC or QTY 1x 8DBC, 8DC, 4DBC, 2DBC & QTY: 1x AC24/4, OC4/24, 4DC or QTY 1x 4DC, AC24/4, OC4/24 w/ 2x 2DC (WHD 19.7x22x4.1)*
MN-CAB4A+P-SUKIT	Symmetry CAB4A Enclosure Kit - Lock, Tamper, AC Mon., PSU-6. Supports: DBU & QTY 1x AC24/4, OC4/24, 4DC, 2DC or QTY 1x 8DBC, 8DC, 4DBC, 2DBC & QTY: 1x AC24/4, OC4/24, 4DC or QTY 1x 4DC, AC24/4, OC4/24 w/ 2x 2DC (WHD 19.7x22x4.1)*
MN-CAB5	Symmetry CAB5 Enclosure - Lock, Tamper, Space for PSU-6. Supports: QTY 1x 8DBC & 8DC or 2x 8DBC, 8DC (WHD 20.8x26.2x4.1)*
MN-CAB5+PSU-KIT	Symmetry CAB5 Enclosure Kit - Lock, Tamper, PSU-6. Supports: QTY 1x 8DBC & 8DC or QTY 2x 8DBC, 8DC (WHD 20.8x26.2x4.1)*
MN-CAB-FIX	Symmetry M2150 Board Fixing Kit - For adding Boards to existing enclosure. Includes standoffs, screws, etc.
MN-RAK3	Symmetry RAK3 Rack Mount Enclosure - 2U, 19", Lock, 3.5A Power Supply. Supports: QTY 1x 8DBC, 8DC, 4DBC, 2DBC or QTY 2x 2DC, 4DC, AC24/4, OC4/24 or DBU & QTY 1x AC24/4, OC4/24, 4DC, 2DC. Require 32" deep rack*
MN-DBU-PLATE	Adapter plate to mount EN-DBU, EN-LDBU, or M2150-DBU in ENC/CABI, 4, 4A, or 5



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Optional Components

M2150-MEM-050K	50,000 cardholder memory module for DBU, 2DBC, 4DBC, 8DBC or 8DBC-OSDP
M2150-MEM-100K	100,000 cardholder memory module for DBU, 2DBC, 4DBC, 8DBC or 8DBC-OSDP
M2150-MEM-250K	250,000 cardholder memory module for DBU, 2DBC, 4DBC, 8DBC or 8DBC-OSDP
WIM4	Wiegand interface module for 4DBC or 4DC. Enables connection of 4 Wiegand readers
WIM8	Wiegand interface module for 8DBC, 8DBC-OSDP, 8DC or 8DC-OSDP. Enables connection of 8 Wiegand readers



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Specifications

✓ Management Software

Symmetry Professional and Enterprise 8.1 or later. For OSDP, need version 9.9 or later.

Operating Environment

- +14°F to 131°F (-10°C to 55°C)
- 15% to 90% humidity, non-condensing

Communications

IP Network

- M2150 DBU and DBC LAN interface (10/100 Mbps)

Hardwired

- DBU or DBC or DBC-OSDP to PC or modem (RS-232) = 45 ft (15 m). RS232 port included as standard
- DBU or DBC or DBC-OSDP to DBU or DBC or DBC-OSDP (20mA) = 3,000 ft (1,000 m). Up to 32 controllers per chain
- DBC to DC (RS485) = 3,000 ft (1,000 m). Up to 16 readers per controller
- DBC-OSDP to DC or DC-OSDP (RS485) = 3000 ft (1,000m). Up to 16 readers per controller
- DBC or DC to Symmetry reader (20mA) = 3,000 ft (1,000 m)
- DBC or DBC-OSDP or DC or DC-OSDP to Wiegand reader (requires Wiegand interface module) = 325 ft (100 m)

Storage Capacities

20,000 cardholders and 65,000 offline transactions

Optional memory modules increase capacity to 50,000, 100,000 or 250,000 cardholders

Inputs/Outputs

M2150 controllers support multiNODE 20mA current loop protocol (MCLP) readers

M2150-OSDP controllers support OSDP and Wiegand readers (MCLP not supported)

Wiegand reader support via optional (WIM) interface module

Door monitor and Exit request inputs support 2, 3 or 4 state supervision

Relay outputs are rated at 30VDC, 3A max

All input modules and alarms controllers support 2, 3, 4 or 6 state input supervision

Each AC24/4 or OC4/24 controller added to an M2150 DBU or DBC reduces the maximum number of readers that the controller can support by four

Note: For single door applications supporting Power over Ethernet, please see the separate EN-IDBC datasheet.

Please refer to price list for part numbers for each referenced item.

