LONIX AUTOMATION

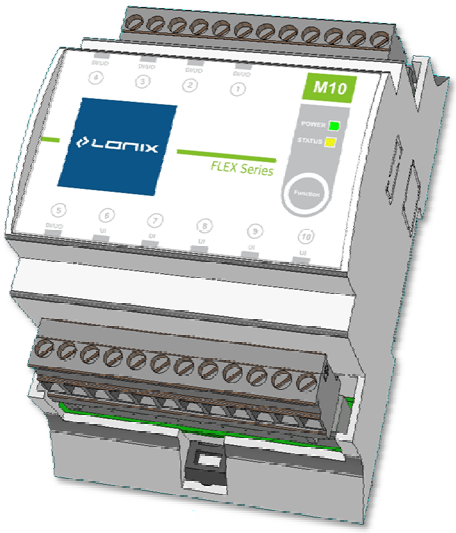
FLEX Series M10 MultiController
LX-BMS-M10

The FLEX Series M10 MultiController, applying the latest technologies and modern design, ensure advanced controls and versatile functionality in complex control systems, all included in a robust single-piece design. The versatile M10 MultiController is perfectly suited for any type of sophisticated controls, such as HVACE systems and other process controls.

The M10 MultiController allows for flexible use of I/O with universal inputs and outputs. Having all the intelligence for complex controls as embedded in each controller, the MultiController supports distributed intelligence and centralized system designs alike.

The system can be easily expanded through the bus plug-in feature available in each controller, allowing controllers to be easily plugged straight into the next controller without any external wiring. Additional operating voltage output 12VDC is available to supply power for e.g. the occupancy detector.

- 32-bit ARM processor
- 10 Flexible I/O Points
- Versatile Functionality
- Robust Single-Piece Design
- User-Friendly Front Panel
- Expansion with Bus Plug-in Feature
- Powerful Flexibility & Scalability



Flexible I/O Points

- 5 UI
- 5 DI/UO
- 2 PID (Controllers)

User-Friendly Front Panel

- 5 dual-color LEDs (YEL/GRN)
- 5 single-color LEDs (GRN)
- Power LED
- Status LED
- Function button

Order Code

- LX-BMS-M10

Technical Data

Operating Voltage:	24V AC/DC (±10%)
Operating Temperature:	10-50℃
Power Required:	0.9 W (with no I/O connected)
Overload Protection:	Automatic PSU safety shutdown
Main Processor:	ARM Cortex™ M4 (Kinetis K10)
Network Processor:	Echelon FT-5000
Network Interface:	TP/FT-10 channel
Memory:	256 kb Flash, 64kb SRAM
Clock Frequency:	50 MHz
Real Time Clock:	RTC, keeping its time during power out of 72 hours
DI:	Potential free contact
AI:	0-10 VDC, Pt1000, Ni1000-LG, Ni1000 (DIN)
DO:	Open collector, max 750 mA/controller
AO:	0-10 VDC, 20 mA
IP Class:	IP20
Size:	110 x 71.30 x 62 mm (4M width)
Mounting:	35 mm DIN rail
Connection Strips:	Detachable, wire max 2,5 mm2, in blocks of two terminals, except the Bus connection in block of three terminals
EMC Compatibility:	Compliance according to EN 55022, EN 61000-4-3 and EN 61000-4-5
Production Standards:	ISO-9001, ISO-14001

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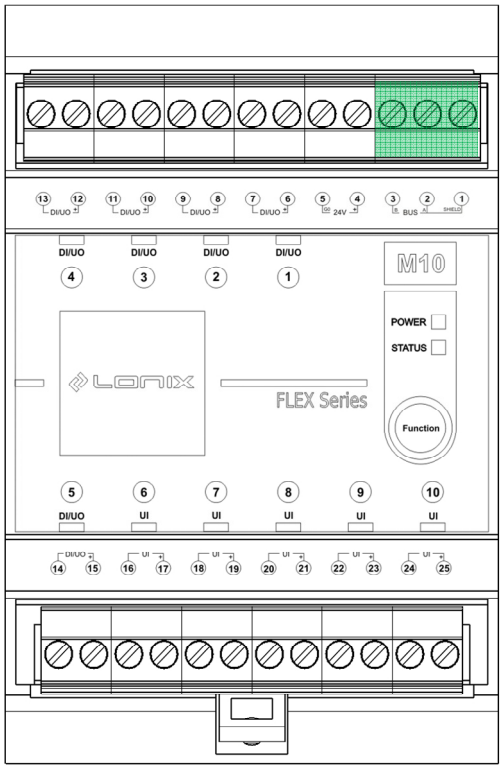
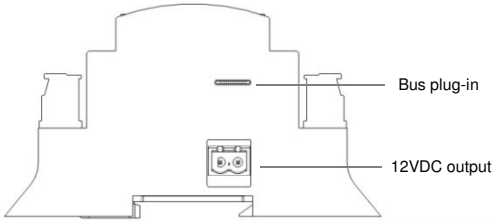
Connection Terminals

1	(Bus connection Shield)
2	Bus connection A
3	Bus connection B
4	G / + (operating voltage 24VAC/DC)
5	G0 / - (operating voltage 24VAC/DC)
6	Point 1 UO/DI+
7	Point 1 UO/DI -
8	Point 2 UO/DI +
9	Point 2 UO/DI -
10	Point 3 UO/DI +
11	Point 3 UO/DI -
12	Point 4 UO/DI +
13	Point 4 UO/DI -
14	Point 5 UO/DI -
15	Point 5 UO/DI +
16	Point 6 UI -
17	Point 6 UI +
18	Point 7 UI -
19	Point 7 UI +
20	Point 8 UI -
21	Point 8 UI +
22	Point 9 UI -
23	Point 9 UI +
24	Point 10 UI -
25	Point 10 UI +



Connection Terminals (Side)

- Bus plug-in: Connector for bus and power chaining between adjacent controllers. Located on both sides of the controller under field removable cover (external pin-plug required).
- 12 VDC output: Power output for external devices e.g. occupancy detector. Max. current 80mA. Located on the right side of controller under field removable cover.



Front Panel

- LED 1…5: Input status (GRN), Output status (YEL)
- LED 6…10: Input status (GRN)
- Power LED: Power indicator (GRN)
- Status LED: Controller functional status (YEL)
- Function button: Service Pin

LED Functions

- DI circuit closed: LED on (GREEN)
- DI circuit open: LED off
- AI measure ok: Short LED blink once in a second (GREEN). (Active (0-10V) and Resistance: LED always on.)
- AI not connected: LED blinking slowly, 4x /second (GREEN). (Active (0-10V) and Resistance: LED always on.)
- AI short-circuited: LED blinking fast, 10x /second (GREEN). (Active (0-10V) and Resistance: LED always on.)
- DO active: LED on (YELLOW)
- DO inactive: LED off
- AO output value: LED 0-100% blinking frequency (YELLOW)

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