

## LX-BMS-M10

- Freely Configurable Intelligent Controller
- 10 Flexible I/O Points (5UI, 5DI/UO)
- User-Friendly Front Panel
- 32-bit ARM Processor
- Versatile Functionality
- Robust Single-Piece Design
- Expansion with Bus Plug-in Feature
- Powerful Flexibility & Scalability



## M10 MULTICONTROLLER

The Lonix 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 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. The user-friendly front panel allows for identifying the status of points and connected devices with one glimpse. Having all the intelligence for complex controls as embedded in each controller, the M10 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.

## FRONT PANEL FEATURES

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

## LONIX LTD

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## TECHNICAL DATA

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

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## CONNECTION TERMINALS

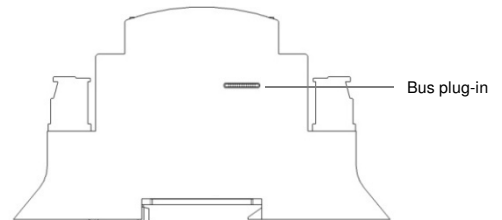
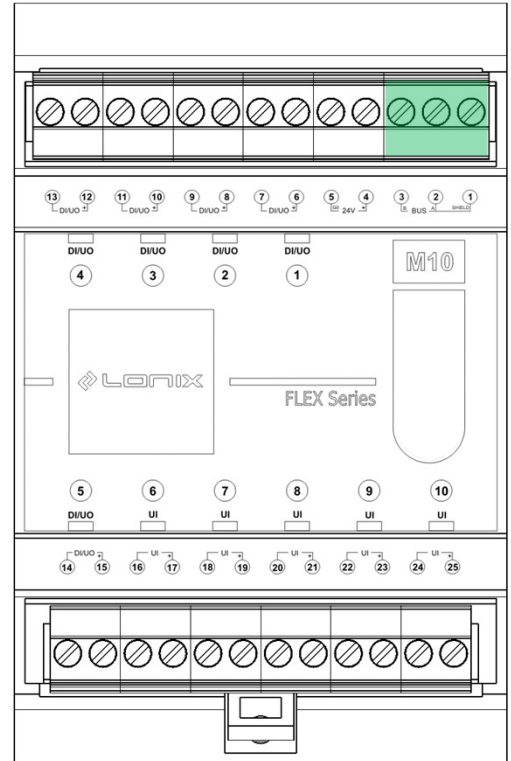
1	(Bus connection Shield)
2	Bus connection A
3	Bus connection B
4	G / + (operating voltage 24VAC/DC)
5	G0 / - (operating voltage 24VAC/DC)
6	Point 1 UO/DI+
7	Point 1 UO/DI -
8	Point 2 UO/DI +
9	Point 2 UO/DI -
10	Point 3 UO/DI +
11	Point 3 UO/DI -
12	Point 4 UO/DI +
13	Point 4 UO/DI -
14	Point 5 UO/DI -
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 +

## BUS PLUG-IN

Bus plug-in is the connector for bus and power chaining between adjacent controllers. Located on both sides of the controller (external pin-plug required).

## 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.) LED blinking slowly, 4x /second (GREEN).
AI not connected:	(Active (0-10V) and Resistance: LED always on.) LED blinking fast, 10x /second (GREEN). (Active (0-10V) and Resistance: LED always on.)
AI short-circuited:	LED on (YELLOW)
DO active:	LED off
DO inactive:	LED on (YELLOW)
AO output value:	LED 0-100% blinking frequency (YELLOW)

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