

# FLEX Series MultiController M10 LX-BMS-M10

The FLEX Series MultiController M10, 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 MultiController M10 is perfectly suited for any type of sophisticated controls, such as HVACE systems and other process controls.

The MultiController M10 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.

#### 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

- 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



## **Technical Data**

Operating Voltage: 24V AC/DC (±10%) Operating Temperature: 10-50 ℃

 Operating Temperature:
 10-50 °C

 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

Network Interface: TP/FT-10 channel
Memory: 256 kb Flash, 64kb SRAM
Clock Frequency: 50 MHz

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)

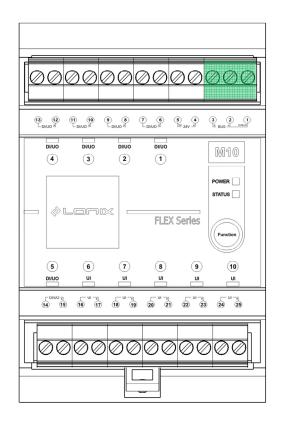
Mounting: 35 mm DIN rail
Connection Strips: Detachable, wire max 2,5 mm2, in blocks of two terminals, except the Bus connection in block of three terminals

EMC Compatibility: Compliance according to EN 55022, EN 61000-4-3 and EN 61000-4-5 Production Standards: ISO-9001, ISO-14001



#### **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

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
Al measure ok: LED on (GREEN)
Al not composted: LED blinking closel

Al not connected: LED blinking slowly (GREEN)
 Al short-circuited: LED blinking fast (GREEN)
 DO active: LED on (YELLOW)

DO inactive: LED off

AO output value: LED 0-100% blinking frequency (YELLOW)

