

**MODBUS/RTU Bus Communication Module**



**MLC 9000+™**

*Maximum Productivity and Versatility for Control without Compromise!*



**DESCRIPTION**

The MODBUS/RTU Bus Communications Module (BCM) is part of the MLC 9000+ DIN-Rail mount PID control system. The BCM handles communication between up to 8 single or multiple loop controller modules and the MODBUS/RTU network. Systems larger than 32 loops can be built using multiple BCMs, within the limitations of your MODBUS/RTU system.

**MODBUS**

CE

UL US

**APPLICATIONS:**

Ideal for multi-zone temperature or process control applications (speed, flow, pressure, etc). Takes the place of either a PLC and multiple discrete controllers or combination PLC/HMI. For users seeking an integrated MODBUS/RTU protocol.

**INDUSTRIES**

Packaging, plastics, converting, semiconductor, food processing, heat treat and environmental test chambers to name a few.

**FEATURE/BENEFITS**

- MODBUS/RTU Port
- Configurable Data Rate
- DIN Rail Mounting
- Software Configuration
- Configurable Assemblies

**PARTLOW™ brand**

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## MODBUS/RTU Bus Communication Module

### SPECIFICATIONS\*

#### STANDARD FEATURES

**Protocol:** MODBUS/RTU (Slave Device)  
Supports up to 8 LCM modules per BCM (for max of 32 loops); Larger systems require multiple BCM's (dependent on bus module(s) type ordered)  
Equipped with MODBUS/RTU Port and Partlow Configuration Port  
**Construction/Enclosure:** Compact, modular, behind the panel (BTP), DIN rail design; NEW ABS black bus module with dedicated Partlow configuration port

#### OPERATING CHARACTERISTICS (APPLIES TO BOTH BCM/LCM)

**Operating Temp:** 32° to 131°F (0° to 55°C)  
**Storage Temp:** -4° to 176°F (-20° to 80°C)  
**Humidity:** 30% to 90% non-condensing R.H.

#### ELECTRICAL

**Power Consumption:** 30W Max  
**Power Connector:** 2-way; 5.08mm (0.2"); Combicon type  
**Line Voltage:** 18-30VDC (including ripple)

#### COMMUNICATIONS INTERFACES

**MODBUS/TCP PORT**  
**Protocol:** MODBUS/RTU (Slave Device)  
**Port:** Connects to a MODBUS/RTU system  
**Function:** Connection of the MLC 9000+ system to a MODBUS/RTU Master Device  
**Configuration:** Data Rate auto detected by BCM from 2.4kbps, 4.8kbps, 9.6kbps and 19.2kbps  
Address 0 – 257 (Default = 96). Configured using the MLC9000+ Configurator software, via the configuration port  
**Messaging Supported:** Function codes 01, 02, 03, 04, 05, 06, 08, 0Fh, 10h and 17h  
**Connector:** 3-way 5.08mm combicon type  
**Diagnostics:** Two Color LED, indicating On/Off-line, Self Test, Bus Fault and Communication Status

**CONFIGURATION PORT**  
**Protocol:** Partlow PC Configuration protocol only  
**Function:** Using the MLC 9000+ configuration software the user can define the data assemblies for communication via MODBUS RTU. This allows the user to fully customize the communication interface to the MLC 9000+ system. The user drags and drops the required parameters into the data assemblies allowing the MODBUS master to gather a several parameters in a single message  
**Diagnostics:** Three color LED, indicating Power Fail, Bus Alarm & Communications Status  
**Connector:** 6-way; RJ11 Type

#### RATINGS/AGENCY APPROVALS

**Safety:** EN61010 and UL/ULc 3121-1  
**EMC:** Certified EN61326-1: 1997  
**Other:** ISO 9002 Registered; MODBUS Organization approval pending.

#### PROTECTION

IEC IP20; Designed for installation in an enclosure which is sealed against dust and moisture.

#### PHYSICAL DIMENSIONS

**Width:** 1.18" (30mm); Up to 8.11" (206mm) for 8 module system up to 32 loops  
**Depth:** 4.72" (120mm)  
**Height:** 3.94" (100mm)  
**Weight:** 7.4 oz (0.21kg)  
**Mounting:** directly fitted onto 35mm Top-Hat DIN rail mounting (EN55022, DIN 46277-3)

#### WARRANTY

3 Years

### ORDERING INFORMATION

MLC 9002-BM220-MB      BCM with MODBUS RTU & Configuration Port

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