



MCS-NitroMag-OEM

Description & Specifications



Part # MCS-NitroMag-OEM

Description

The **MCS-NitroMag-OEM** is a control system containing a Keypad, a processor, memory, eMMC Flash, and supporting power circuitry. The Broadcom quad-core processor delivers a blazing speed of 1.5GB.

The MCS-NitroMag-OEM features an easy-to-use keypad with three function keys, four directions keys and two selection keys (Menu & Enter).

The display LCD is 128 x 64 dot pixel graphics, 2.8" diagonal viewing area with White characters on a dark background (reversible). Includes a NEMA Type 1 faceplate for easy mounting to an enclosure door.

The MCS-NitroMag-OEM controller allows for 144 SI inputs, 90 RO outputs, and 36 AO outputs. (Expansion Boards required).

It comes with a built-in WiFi interface for Ethernet connectivity, and an onboard WiFi antenna connection.

Includes a **Modbus interface** which enables it to act as a Modbus Master using the Modbus RTU protocol, which allows communication with Modbus slave devices for parameter access.

It features various connection ports for:

- 2 HDMI ports (1 Standard & 1 micro)
- WiFi antenna connection
- 12vdc power input connection
- Ethernet port (10Mbps/100Mbps/1Gbps)
- Two RS-485 Ports up to 115200 baud rate
- MCS-IO port for communicating with expansion boards

Specifications

Keypad

- Dimensions 5.26"w x 8.50"h x 1.32"d (133.6mm x 215.9mm x 33.62mm)
- Display 128 x 64 dot pixel STN monochrome graphics LCD with 2.8" diagonal viewing area
- Color White characters on a blue background (Reversible)
- Keypad Size 5.26"w x 8.50"h (8 mounting studs)
- Keypad Layout 9 keys (3 function keys)
- Operating Temperature -4°F to +185°F (-20°C to +85°C)
- Operating Humidity 0-95% Non-Condensing

Controller

- Microprocessor Broadcom BCM2711 quad core Cortex (ARMv8) 64-bit SoC @ 1.5GHz

INPUT	MINIMUM	NOMINAL	MAXIMUM
VOLTAGE	10	12	12.5
AMPS			0.5

- Flash Memory 16 GB EMMC
- RAM 2 GB DDR3
- MCS-I/O Comm Port. 1 @ 38,400 baud
- RS-485 Ports 2 @ go up to 115200 baud rate
- Ethernet 10 Mbps/100Mbps/1Gbps
- HDMI 2 HDMI 2.0 ports-Standard and Micro
- WiFi 2.4 GHz, 5.0GHz 8.02 b/g/n/ac wireless
- USB 2 USB type B 2.0 ports 480Mbps signalling
- Protocols BACnet IP, BACnet MSTP, Modbus IP, Modbus RTU Slave, Modbus RTU Master (BTL certification coming soon)
- Real Time Clock Battery backup(Type BR2032)
- Power Detection Automatic power fail reset

POWER SUPPLY NOT INCLUDED

Packaging

- Keypad OEM w/MCS-NitroMag-N controller installed
- WiFi Antenna w/cable & extended cable
- Ship Weight 2.00 lbs (approx)
- Box Dimensions 14" x 9.5" x 2.5" (approx)