MCS-NitroMag-OEM
Description & Specifications

Included:
WiFi / Bluetooth Antenna
& extended cable

File No: E169780

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
- Bluetooth connection
- 12vdc power input connection
- Ethernet port (10 Mbps/100 Mbps/1 Gbps)
- 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
(133.6 mm x 215.9 mm x 33.62 mm
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.... -40°F to +185°F (-40°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
Bluetooth ..... Bluetooth 5.0, 24GHz Bluetooth Low Energy (BLE)
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)
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 ..... 2.30 lbs (approx)
Box Dimensions..... 12" x 3" x 4" (approx)

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