



MCS-NitroMag-PANEL

Description & Specifications



Part # MCS-NitroMag-PANEL

Description

The **MCS-NitroMag-PANEL** 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-PANEL 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 bracket for easy installed on backplane inside an enclosure.

The MCS-NitroMag-PANEL 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 Panel

Panel overall Size..... 5.5"w x 8.625"h x 1.98"d
(140mm x 219mm x 50.42mm)

Mounting..... Mounts on a backplane using four #6 (6-32) sheet metal screws

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 Size5.26"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

Flash Memory 16 GB EMMC

INPUT	MINIMUM	NOMINAL	MAXIMUM
VOLTAGE	10	12	12.5
AMPS			0.5

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

WiFi2.4GHz, 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 Panel w/MCS-NitroMag-N controller installed, WiFi Antenna w/cable & extended cable

Ship Weight 2.00 lbs (approx)

Box Dimensions..... 9" x 6-1/2" x 2-3/4" (approx)