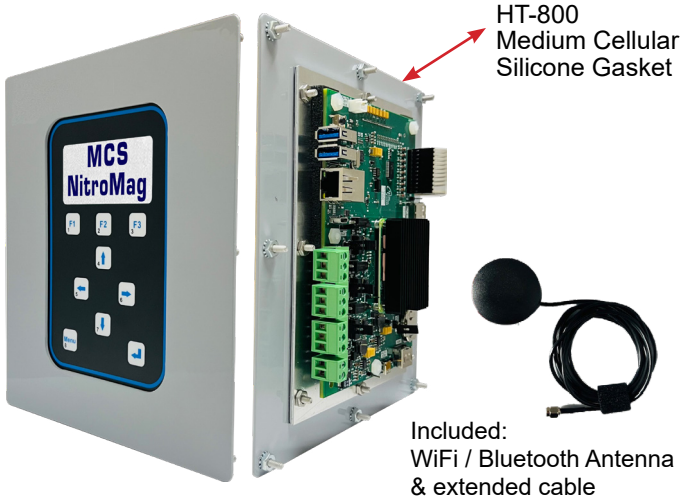
MCS-NitroMag-DOOR-NEMA4
Description & Specifications



(MCS-NITROMAG is pending acceptance by UL as a Recognized Component)

Description

The **MCS-NitroMag-DOOR-NEMA4** has been sealed in its own frame using a new Gasket (HT-800 Medium Cellular Silicone). It 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).

The MCS-NitroMag-DOOR-NEMA4 is a control system containing a processor, memory, eMMC Flash, and supporting power circuitry. The Broadcom quad-core processor delivers a blazing speed of 1.5GHz.

The MCS-NitroMag-DOOR-NEMA4 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 mounted on the front.

The MCS-NitroMag-DOOR-NEMA4 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 mini & 1 micro)
- WiFi antenna connection
- Bluetooth connection
- 12vdc power input connection
- Ethernet port (10 Mbps/100 Mbps/1Gbps)
- Two RS-485 Ports up to 115200 baud rate
- MCS-IO port for communicating with expansion boards

Specifications

Keypad Door-Nema

Dimensions ..... 7.25"w x 8.50"h x 1.48"d
(184.15 mm x 215.9 mm x 37.77 mm)
Mounts using supplied #6-32 Kep nuts

Display ..... 28 x 64 dot pixel STN monochrome graphics LCD with 2.8" diagonal viewing area

Color ..... White characters on a blue background (Reversible)

Gasket Material ..... HT-800 Medium Cellular Silicone

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

Ship Weight ..... 2.30 lbs (approx)

Box Dimensions ..... 12" x 3" x 4" (approx)

5580 Enterprise Pkwy., Fort Myers, FL 33905
Office: 239-694-0089 • Fax: 239-694-0031 www.mcscontrols.com

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