MCS-NitroMag-PANEL
Description & Specifications

Included:
WiFi / Bluetooth Antenna
& extended cable

File No: E169780

Description

The **MCS-NitroMag-PANEL** is a system module 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 faceplate for easy installed on backplane inside an enclosure.

The MCS-NitroMag-N 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 internet and device 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 supply 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 Panel

Panel overall Size.....5.5"W x 8.625"h x 2.0"d
(140mm x 219mm x 50.8mm)
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 Size .....5.26"w x 8.50"h (8 mounting studs)
Keypad Layout..... 9 keys (3 function keys)
Connection..... 6 conductor shielded cable
. (max length of cable is 10 feet)
Operating Temperature.....-40°F to +185°F (-40°C to +85°C)
Operating Humidity.....0-95% Non-Condensing
Input Power (Standard) .....+12vdc at 0.6amps (fully loaded)
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
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 w/MCS-NitroMag controller installed, WiFi Antenna
Ship Weight..... 2.25 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