



MCS-NITROMAG-SB INDUSTRIAL CONTROL PANEL



Part # MCS-NITROMAG-SB*

Description

The **MCS-NITROMAG-SB Industrial Control Panel*** is made of powder coated aluminum for durability and longevity. A left hand swing door is mounted with three seven-inch hinges for strength. A key lock is provided for security on the door while still giving easy access of the display and keypad.

Critical safety components manufactured by MCS and installed in this panel are UL Recognized Components under UL File #169780 and are also ROHS compliant.

The MCS-NITROMAG-SB comes standard equipped with a MCS-NITROMAG micro controller, MCS-IO-BASE, MCS-IO-EXT. It includes a processor, memory, eMMC Flash, and supporting power circuitry.

Keypad/LCD, a 20 amp and a 5 amp circuit breakers. There is also an electrical outlet for laptop plug-in power at the panel.

Power is supplied using a MCS-12V power supply.

SHIELDWIRE-GROUNDING multi-terminal connectors are included to eliminate stray electrical current, thereby helping to reduce line noise from the sensors to the controller.

Options are available for all MCS-NITROMAG Control Panels with Touch Screens. These options are factory installed by MCS at time of purchase. Visit our website for options available.

Packaging

Keypad OEM w/MCS-NitroMag-N controller installed
WiFi Antenna w/cable & extended cable

Weight40 lbs(approx)
Box24" X 30" x 10"

Specifications

Industrial Control Panel*

NEMA Rating – Type 2; IP 30

Enclosure Dimensions 18.2" w x 24.75" h x 8" d
462.28 W x 628.65 H x 203.2 D mm
Mounting Holes Mounts, four pre drilled 15/32" holes
Rated Voltage (Standard) 120VAC or 230VAC
Phase / Frequency 1 Phase / 60Hz
Full Load Current(approx) 40A at 120VAC or 20A at 240VAC
Short Circuit Current Rating .. 10kA

TEMPERATURE RANGE Control Panel/Keypad/LCD

Operating Temp. of panel -4°F to +158°F (-20°C to + 70°C)
Operating Humidity 0-95% Non-Condensing
Storage Temp. -22°F to +185°F (-30°C to + 85°C)

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 -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
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 pending)
Real Time Clock Battery backup (Type BR2032)
Power Detection Automatic power fail reset

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* Photo shown is an example of an Industrial Control Panel; some optional equipment may be shown.

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