MS-Connect 5100

Flexible Mounting

RS-232 & USB Programming Ports

RS-485 & Ethernet Communication Ports

RoHS • WEEE COMPLIANT

Concentrator & Protocol Converter

The MS-Connect 5100 serves as a data collector and manager for automatic ID networks with Microscan readers. Use the MS-Connect 5100 to connect and configure up to 32 readers in minutes with simple menu-driven software. The compact device features multiple communication options, including Ethernet protocols for high speed communication with a host.

The MS-Connect 5100 provides an ideal communication tool for use with any Microscan scanner or imager.

MS–Connect 5100: Easy Communication

· Protocol conversion allows communication via Ethernet
· Supports polling of up to 32 readers using RS-485
· Programming port options include USB and RS-232
· Provides serial data transmission rates up to 115,200 baud

For more information on this product, visit www.microscan.com.

Protocols
The MS-Connect 5100 provides communication to a host using serial or Ethernet communication. Ethernet TCP/IP and Ethernet IP protocols are available out of the box. Other protocols are available with optional expansion cards.

Continuous Polling
The MS-Connect 5100 uses RS-485 multidrop protocol for uninterrupted communication between the concentrator and the multidrop network.
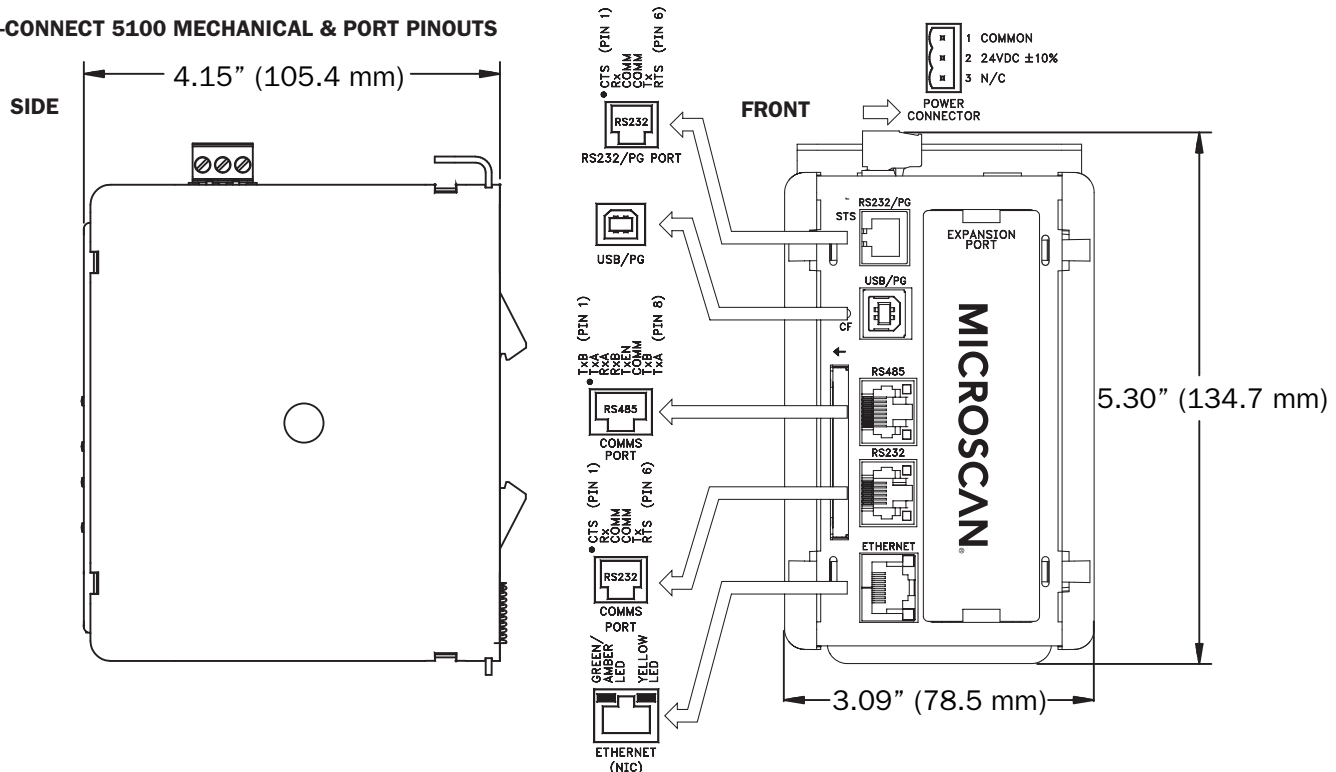
Programming Ports
The MS-Connect 5100 can be easily programmed using the USB port or the RS-232 port via an RJ12 connector.

Time and Date Stamp
This option allows the user to select the time and date format to prepend to the data decoded by a reader.

Simple Configuration
ESP software allows you to configure the MS-Connect 5100 and the networked readers within minutes.

MICROSCAN.

MS–Connect 5100 Specifications and Options

MS-CONNECT 5100 MECHANICAL & PORT PINOUTS

SIDE

4.15" (105.4 mm)

FRONT

1 COMMON
2 24VDC ±10%
3 N/C
POWER CONNECTOR

CTS (PIN 1)
Rx
COMM
COMM
Tx
RTS (PIN 6)
RS232
RS232/PG PORT

USB/PG

RS232/PG
STS

USB/PG
CF

EXPANSION PORT

MICROSCAN®

TxB (PIN 1)
TxA
RxA
RxB
TxEN
COMM
TxB
TxA (PIN 8)
RS485
COMMS PORT

RS485

RS232

CTS (PIN 1)
Rx
COMM
COMM
Tx
RTS (PIN 6)
RS232
COMMS PORT

ETHERNET

5.30" (134.7 mm)

3.09" (78.5 mm)

GREEN/AMBER LED
YELLOW LED
ETHERNET (NIC)

MECHANICAL
Length: 4.15" (105.4 mm) **Width**: 3.09" (78.5 mm)
Height: 5.30" (134.7 mm) **Weight**: 15.1 oz. (456.4 g)

ENVIRONMENTAL
Operating Temperature: 0° to 50° C (32° to 122° F)
Storage Temperature: -30° to 70° C (-22° to 158° F)
Operating and Storage Humidity: 80% max relative humidity, non-condensing, from 0 to 50° C (32° to 122° F)
Vibration: According to IEC 68-2-6: 5 to 150 Hz, in X, Y, Z direction for 1.5 hours, 2 g's
Shock: According to IEC 68-2-27: Operational 30 g, 11 msec in 3 directions
Altitude: Up to 2000 meters

ELECTRICAL
Power: 24 VDC ± 10% 200 mA min., without expansion card 1 Amp maximum with expansion card fitted; must use Class 2 or SELV rated power supply

COMMUNICATIONS
USB/PG Port:
Adheres to USB specification 1.1, Device only using Type B connection
Serial Ports:
RS-422/485 port via RJ45, and RS-232 port via RJ12 Format and Baud Rates for each port are individually software programmable up to 115,200 baud
Ethernet Port:
10 BASE-T / 100 BASE-TXRJ45 jack is wired as a NIC (Network Interface Card)

LEDS
STS: Status LED indicates condition of MS-Connect 5100
TX/RX: Transmit/Receive LEDs show serial activity
Ethernet: Link and activity LEDs

MEMORY
Memory Card: CompactFlash Type II slot for Type I and Type II cards to be used for profile loading only

REAL-TIME CLOCK
Typical accuracy is less than one minute per month drift. SNTP facility allows synchronization with external servers.

CONSTRUCTION
Case body: Black high impact plastic and stainless steel, Installation Category I, Pollution Degree 2.8
Battery: Lithium Coin Cell, Typical lifetime of 10 years at 25° C

POWER CONNECTION
Terminal Block: Removable wire clamp screw
Wire Gage Capacity: 24 AWG to 12 AWG
Torque: 4.45 to 5.34 in/lb (0.5 to 0.6 N-m)

MOUNTING
Type: Snaps onto standard DIN style top hat (T) profile mounting rails according to EN50022 -35 x 7.5 and -35 x 15

ELECTROMAGNETIC COMPATIBILITY
Emissions and Immunity to EN 61326: Electrical Equipment for Measurement, Control and Laboratory use
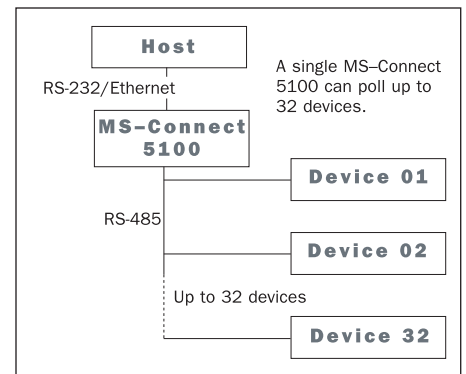
IMMUNITY TO INDUSTRIAL LOCATIONS:
Electrostatic discharge: EN 61000-4-2: Criterion A2, 4kV contact discharge, 8kV air discharge
Electromagnetic RF fields: EN 61000-4-3: Criterion A, 10 V/m
Fast transients (burst): EN 61000-4-4: Criterion A, 2 kV power, 2 kV signal
Surge: EN 61000-4-5: Criterion A, 1 kV L-L, 2 kV L&N-E power
RF conducted interference: EN 61000-4-6: Criterion A, 3 V/rms

EMISSIONS
Classification: EN 55011 Class A

TYPICAL NETWORK

Host

RS-232/Ethernet

MS–Connect 5100

RS-485

Device 01

Device 02

Up to 32 devices

Device 32

A single MS–Connect 5100 can poll up to 32 devices.

SAFETY CERTIFICATIONS DESIGNED FOR
FCC, CE, UL/cUL

ROHS/WEEE COMPLIANT

ISO CERTIFICATION
Certified ISO 9001:2008 Quality Management System

MICROSCAN®

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