

# MS-5000

The MS-5000 serves as a data collector and manager for automatic ID networks. The scanner can poll up to 50 devices including scanners and decoders, over an RS-485 multidrop network. Like all of Microscan's products, the MS-5000 multidrop concentrator offers simple, menu-driven configuration firmware making it simple to integrate with a host computer, PLC, or other I/O device. The MS-5000 can handle data flow transmission rates up to 38.4K baud. If needed, several MS-5000 concentrators can be cascaded to poll more than 50 devices. The MS-5000 operates well as a data flow manager for any multidrop application using scanners, decoders, printers, or other devices.

# CONCENTRATOR

**Communication:** The MS-5000 concentrator can transfer data over the multidrop network, including communication with the host computer, at a rate of up to 38.4K baud.

**Direct, continual polling of the device network:** The MS-5000's RS-485 multidrop protocol allows for uninterrupted communication between the concentrator and the device network.

**Simple integration with the host computer:** Easy-to-set, built-in software makes the MS-5000 concentrator simple to configure with menus that are accessible through the host system, a PC, or

**Time stamping:** The Time Keeping menu allows you to determine the way that time and date information is output after the scanner decodes a symbol.

**Direct terminal hookup through auxiliary port:** The auxiliary port allows you to conveniently access the configuration menus to change parameters or review the current status of devices on the network.

**Battery-backed RAM:** A total of 18K of battery-backed RAM manages data for first-in, first-out transmission to the host and safeguards the MS-5000 concentrator against momentary power fluctuations.

**Multicolored status LEDs:** Three LEDs indicate the concentrator's status. Indicator 1 flashes green when data is sent to the host. Indicator 2 illuminates red when the concentrator is in a ready state or is polling the networked devices. The power LED illuminates red while power is on.

**Service Support:**

- Extended warranty
- 24-hour exchange program
- Training
- On-site service
- Technical help desk



an ASCII terminal. RS-232, RS-422, and RS-485 communication parameters can be quickly established between the concentrator and host. Furthermore, the MS-5000 offers a wide selection of communication interfaces and protocols with standard and user-defined options available.

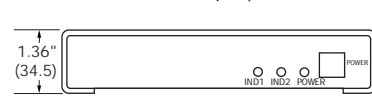
# MS-5000 CONCENTRATOR

## Specifications

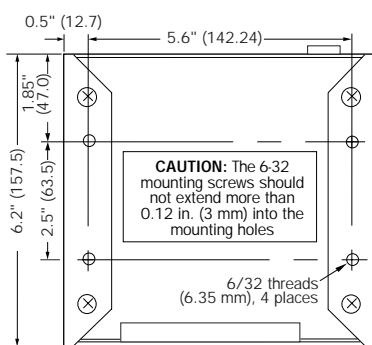
### MECHANICAL

**Length:** 6.20 in. (15.75 cm)  
**Width:** 6.61 in. (16.79 cm)  
**Height:** 1.36 in. (3.45 cm)  
**Weight:** 16 oz. (453 grams)

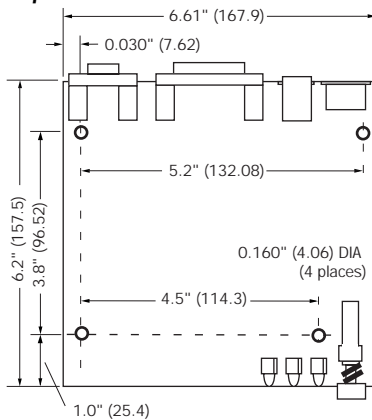
#### Front



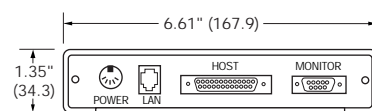
#### Bottom



#### Top



#### Back

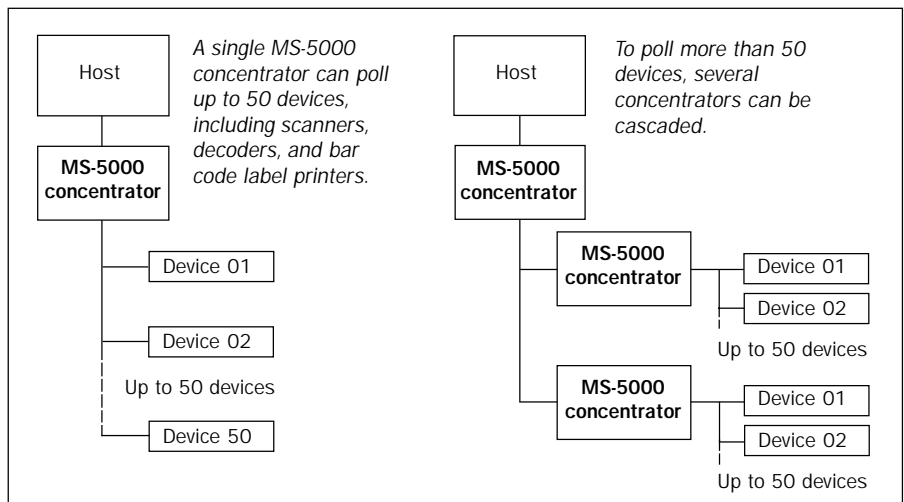


### COMMUNICATION

#### Host

Port: 25-pin D sub socket wired as DTE  
 Interfaces: RS-232, RS-422, and RS-485 multidrop  
 ASCII format: 7 or 8 data bits  
 Stop bits: 1 or 2  
 Baud rates: 600, 1200, 2400, 4800, 9600, 19.2K, or 38.4K  
 Selectable parity: odd, even, or none  
 Protocols: point-to-point, polling mode D, multidrop, user defined, and user defined multidrop

### TYPICAL NETWORKS



#### LAN (to polled devices)

Port: RJ-11 6-pin modular socket  
 Interface: 4-wire RS-485, RS-422  
 ASCII format: 7 or 8 data bits  
 Stop bits: 1 or 2  
 Baud rate: 600, 1200, 2400, 4800, 9600, 19.2K, or 38.4K  
 Protocols: multidrop, user defined multidrop (up to 50 devices per concentrator)

#### Auxiliary (to terminal or monitor)

Port: 9-pin D sub plug  
 Interface: RS-232  
 ASCII format: 7 or 8 data bits  
 Stop bits: 1 or 2  
 Baud rate: 2,400, 4800, 9600, 19.2K, or 38.4K  
 Protocol: point-to-point

#### Memory buffer

18K of battery-backed RAM for first-in-first-out data management

### ELECTRICAL

#### Power requirements:

+ 12 VDC @ 40 mA maximum, 20 mV p-p max. allowed ripple  
 -12 VDC @ 40 mA maximum, 20 mV p-p max. allowed ripple  
 +5 VDC @ 300 mA maximum, 200 mV p-p max. allowed ripple

### ENVIRONMENTAL

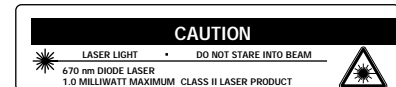
#### Operating temperature

32° to 113°F (0° to 45°C)

#### Storage temperature

-58° to 158°F (-50° to 70°C)

#### Humidity: up to 95% (non-condensing)



ISO 9001/Cert. No. US96/0465

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 Specifications subject to change.

**Warranty**—One year limited warranty on parts and labor. Extended warranty available.

### STATUS LIGHTS

| LED       | Color | Condition   |
|-----------|-------|---|
| Power LED | Red   | Illuminates on power-on   |
| IND1      | Green | Flashes each time data is sent to the host  |
| IND2      | Red   | Illuminates whenever the concentrator is in a ready state or is polling the connected devices. When this light goes off, a data-buffer-full condition exists and the concentrator is no longer polling the devices. |

# MICROSCAN®

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