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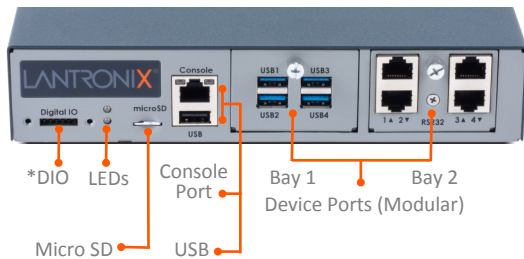
WHAT'S IN THE BOX

Quick Start Guide	EMG 8500	Accessories	Part Number	Quantity
		External Universal AC (100W, 12V) Power Supply	ACC-520-0164-00	1
		North American Power Cord - 110V AC power cord, 8 ft (2.43m), RoHS	ACC-500-041-R	1
		RJ45 to DB9F Adapter	ACC-200.2070A	1
		RJ45 to RJ45, CAT5 Cable, 6.6 ft (2 m)	ACC-200.0062	1
		RJ45 Loopback Cable	ACC-500-153	1
		Rubber feet with adhesive	120-008-R	4 pieces
		Additional I/O and Connectivity FRUs are available and sold separately.	varies	varies

EMG851210SP with USB and RJ45 FRUs shown. Additional FRU combinations are available.

1. HARDWARE OVERVIEW

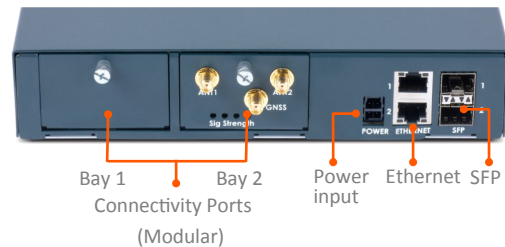
Front View



The EMG 8500 unit offers up to 8 RJ45 (RS-232) or USB serial device port connections in 2 user-swappable, front I/O module device bays.

*Front DIO adapter is available and sold separately.

Back View



The back of the EMG 8500 unit offers up to 2 connectivity ports for out-of-band management in 2 user-swappable module bays.

2. CONNECTING THE EMG 8500

The front console port allows a dumb terminal or PC with terminal emulation software to locally access management functions and connected devices.


The device ports allow simple and flexible connections to serial devices using adapters and a standard CAT5 cable. Connect one end of the CAT5 cable to the device port and the other end to an adapter that attaches to the serial console of the target system.

The default communication parameters for the device ports and console ports are:

- 9600 baud
- 1 stop bit
- 8 data bits
- No flow control
- No parity

Note: EMG 8500 device ports are reversed by default, and are software configurable.

Default Pin Assignments

Console Port (RS-232)	Device Ports (RS-232)
	Reversed by Default
1. RTS (Out) 2. DTR (Out) 3. TX (Out) 4. GND 5. GND 6. RX (In) 7. DSR (In) 8. CTS (In)	1. CTS (In) 2. DSR (In) 3. RX (In) 4. GND 5. GND 6. TX (Out) 7. DTR (Out) 8. RTS (Out)
Not Reversible	Software Reversible

3. HARDWARE INSTALLATION

1. Install the unit on a desktop or other flat, horizontal surface. Rack mount and wall mount kits are available as optional accessories.

2. Install the I/O modules on the front of the unit and the connectivity modules on the back.

Warning: Always remove the power cord prior to installing or removing a connectivity or I/O module. Failure to do so could damage the unit.

3. Connect the equipment to the device ports on the front of the unit using the appropriate cables and adapters.

4. Connect the unit to the network using the upper network port (Ethernet 1 or SFP).

5. Connect the power cord to apply power.

6. The top front LED turns green to indicate that power is ON and at least one of the Ethernet ports has a link or both Ethernet ports are disabled. The LED blinks red if none of the enabled Ethernet ports has a link.

7. Wait about a minute and a half for the boot process to complete. The first time you power up the EMG unit, Eth1 tries to obtain its IP Address via DHCP.

Warning: If rack mounting the EMG, do not block the air vents on the sides of the unit. If mounted in an enclosed rack, it is recommended that the rack have a ventilation fan.





4. IP ADDRESSING

The EMG 8500 network ports (Ethernet 1 and Ethernet 2) default to DHCP-assigned IP addresses. If you want to assign a different IP address, it must be within a valid range, unique to your network, and on the same subnet as your workstation.

Note: You can view the IP address by running the Lantronix Provisioning Manager (LPM) application. [Download Lantronix Provisioning Manager](#) and follow instructions in the user guide to discover devices.

To configure the EMG unit, you need the following information:

IP address (if not already assigned): _____ . _____ . _____ . _____
Subnet mask (if not already assigned): _____ . _____ . _____ . _____
Gateway: _____ . _____ . _____ . _____
DNS: _____ . _____ . _____ . _____

5. RUN QUICK SETUP TO CONFIGURE NETWORK (IP) SETTINGS

To set up the network connections, you may do one of the following:

- ◆ Complete the Quick Setup on the Web Manager.
- ◆ SSH to the command line interface and follow the Quick Setup script
- ◆ Connect a terminal to the console (RS-232) port and follow the Quick Setup script on the command line interface

Note: To access the web page or to access the command line interface using SSH or Telnet, the EMG unit must have a network connection and IP address.

The Quick Setup script lets you configure the Eth1 network settings, change the date and time, and change the sysadmin password. After you save the values for your EMG, the changes take effect immediately.

6. LOGGING IN

To log in to the EMG 8500 web page:

1. Open a web browser.
2. In the URL field, type <https://> followed by the IP address of the EMG.
3. Enter the default user credentials. Username: **sysadmin** and Password: **last 8 characters of the Device ID** (for newly manufactured devices that come installed with 8.2.0.1 or later) or **PASS**.
Note: If the Device ID is not set, the password is the last 8 characters of the serial number.

The first time you log in, the EMG 8500 Quick Setup page is displayed. Subsequent logins will display the EMG 8500 Home Page.

4. Do one of the following:
 - In Quick Setup, update the basic network parameters. Click **Apply**.
 - Bypass the Quick Setup page to begin configuring the EMG. Click the **Accept default Quick Setup settings** checkbox and click **Apply**.

After you save the values for the EMG unit, the changes take effect immediately.

Note: Change the default password as soon as possible to prevent access by unauthorized personnel.

To access the command line interface:

1. With a network connection, use a Telnet or SSH program to Telnet or SSH to **xx.xx.xx.xx** (the IP address in dot quad notation), and press **Enter**. The login prompt displays.

Note: By default, Telnet is disabled. To enable it, use the Services web page, a serial terminal connection, or an SSH connection with a serial terminal connection.

2. Enter the default user credentials. Username: **sysadmin** and Password: last 8 characters of the Device ID (for newly manufactured devices that come installed with 8.2.0.1 or later) or **PASS**.

Note: The Device ID can be found on the product label on the unit or in the boot messages on the console.

3. If the Quick Setup script displays, update basic network parameters or press **Enter** to accept the current settings.

For command line interface help, type **"help command line"** or **."help"** followed by the command.

SAFETY AND HAZARDS

Do not operate your EMG 8500 device:

- In areas where blasting is in progress
- Where explosive atmospheres may be present including refueling points, fuel depots, and chemical plants
- Near medical equipment, life support equipment, or any equipment which may be susceptible to any form of radio interference. In such areas, the EMG 8500 **MUST BE POWERED OFF**. Otherwise, the EMG 8500 can transmit signals that could interfere with this equipment.

In an aircraft, the EMG 8500 **MUST BE POWERED OFF**. Otherwise, the EMG 8500 module can transmit signals that could interfere with various onboard systems and may be dangerous to the operation of the aircraft

or disrupt the cellular network. Use of a cellular phone in an aircraft is illegal in some jurisdictions. Failure to observe this instruction may lead to suspension or denial of cellular telephone services to the offender, or legal action or both.

This device is limited to indoor use only. It may not be operated outdoors.

This equipment should be installed and operated with a minimum distance of 20 cm separating the antenna and your body.

Warning: Always remove the power cord prior to installing or removing a connectivity or I/O module. Failure to do so could damage the unit.

Contact Technical Support

For technical support queries, visit <https://www.lantronix.com/support> or call (800) 422-7044 Monday – Friday from 6:00 a.m. – 5:00 p.m., Pacific Time, excluding holidays.

Latest Firmware For the latest firmware downloads, visit <https://www.lantronix.com/support/downloads>