

# Trapeze Mobility Point™

## MP-71 Installation Guide



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### **Comments and Feedback**

Your feedback on Trapeze documentation is important to us. Send any comments and suggestions to [doc-bugs@trapezenetworks.com](mailto:doc-bugs@trapezenetworks.com).

**For the most current version of all documentation, see [www.trapezenetworks.com](http://www.trapezenetworks.com).**



# Customer Service

For general information about Trapeze Networks Mobility System™ products and services, visit [www.trapezenetworks.com](http://www.trapezenetworks.com). For warranty, license, and support information, visit the following sites:

- **Warranty and software licenses.** Current Trapeze Networks warranty and software licenses are available at [www.trapezenetworks.com/services/warranty.asp](http://www.trapezenetworks.com/services/warranty.asp).
- **Support services.** For information about Trapeze support services, visit [www.trapezenetworks.com/services/](http://www.trapezenetworks.com/services/). Or call 1-866-877-9822 (in the US or Canada) or +1 925-474-2400 and select option 5.



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**Note.** TRAPEZE NETWORKS SELLS AND SERVICES ITS PRODUCTS PRIMARILY THROUGH ITS AUTHORIZED RESELLERS AND DISTRIBUTORS. If you purchased your product from an authorized Trapeze reseller or distributor and do not have a service contract with Trapeze Networks, you must contact your local reseller or distributor for technical assistance.

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## Contacting the Technical Assistance Center

Contact the Trapeze Networks Technical Assistance Center (TAC) by telephone, email, or fax. If you have a service contract or are a Trapeze Authorized Partner, log in to [www.trapezenetworks.com/services/sup\\_programs.asp](http://www.trapezenetworks.com/services/sup_programs.asp) for more help.

- Within the US and Canada, call 1-866-TRPZTAC (1-866-877-9822).
- From locations outside the US and Canada, call +1 925-474-2400.
- In non-emergencies, send email to [support@trapezenetworks.com](mailto:support@trapezenetworks.com).
- When your case is active, you can fax more information to +1 925-474-2423.

(See “TAC Response Time” and “Information to Have Available” on page iv.)



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## TAC Response Time

TAC responds to service requests as follows:

<b>Contact method</b>	<b>Priority</b>	<b>Time of call</b>	<b>Probable response time</b>
Telephone	Emergency	Monday through Friday, 8 a.m. to 6 p.m. Pacific Time (GMT-8)	Immediate
	Emergency	After hours	1-hour callback
	Non-emergency	Monday through Friday, 8 a.m. to 6 p.m. Pacific Time (GMT-8)	Same business day
	Non-emergency	After hours	Next business day
Email	Non-emergency	Monday through Friday, 8 a.m. to 6 p.m. Pacific Time (GMT-8)	1-hour callback
	Non-emergency	After hours	Next business day

## Information to Have Available

To expedite your service request, have the following information available when you call or write to TAC for technical assistance:

- Your company name and address
- Your name, telephone number, cell phone or pager number, and email address
- Name, model, and serial number of the product(s) requiring service
- Software version and release number
- Wireless client information
- License levels for RingMaster™ and Mobility Exchange™ (MX™) products
- Description of the problem and status of the troubleshooting effort



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# Introducing the Trapeze Networks Mobility System

Trapeze Networks Mobility System .....	1
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This guide shows you how to install a Trapeze Networks™ Mobility Point™ (MP™) access point, model MP-71, in a Trapeze Networks Mobility System™ wireless LAN (WLAN).

Read this guide if you are a network administrator or other person installing MP access points in a network.

## Trapeze Networks Mobility System

The Trapeze Networks Mobility System is a system for planning and deploying a secure wireless LAN (WLAN) in an existing wired enterprise network. The Trapeze system provides authenticated connectivity to both wireless and wired users in large environments such as office buildings, hospitals, and university campuses.

The Trapeze Mobility System fulfills the three fundamental requirements of an enterprise WLAN: It eliminates the distinction between wired and wireless networks, allows users to work safely from anywhere (*secure mobility*), and provides a comprehensive suite of intuitive tools for planning and managing the network before and after deployment.



The Trapeze Networks Mobility System consists of the following components:

- **RingMaster tool suite**—a full-featured graphical user interface (GUI) application for planning, configuring, deploying, and managing a WLAN and its users
- **One or more Mobility Exchange™ (MX™) switches**—distributed, intelligent machines for managing user connectivity, connecting and powering Mobility Point (MP) access points, and connecting the WLAN to the wired network backbone
- **Multiple Mobility Point (MP) access points**—wireless access points (APs) that transmit and receive radio frequency (RF) signals to and from wireless users and connect them to an MX switch
- **Mobility System Software™ (MSS™)**—the operating system that runs all MX switches and MP access points in a WLAN, and is accessible through a command-line interface (CLI), the Web View interface, or the RingMaster™ GUI

## Safety and Advisory Notices

The following kinds of safety and advisory notices appear in this manual. For translations of all safety warnings, see Trapeze Regulatory Information document.



**Caution!** This situation or condition can lead to data loss or damage to the product or other property.

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**Warning!** This situation or condition can cause injury.

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**Warning!** High voltage. This situation or condition can cause injury due to electric shock.

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**Warning!** Radiation. This situation or condition can cause injury due to improper handling of fiber-optic equipment.

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**Note.** This information is of special interest.

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## Text and Syntax Conventions

Trapeze manuals use the following text and syntax conventions:

<b>Convention</b>	<b>Use</b>
Monospace text	Sets off command syntax or sample commands and system responses.
<b>Bold text</b>	Highlights commands that you enter or items you select.
<i>Italic text</i>	Designates command variables that you replace with appropriate values, or highlights publication titles or words requiring special emphasis.
<b>Menu Name &gt; Command</b>	Indicates a menu item that you select. For example, <b>File &gt; New</b> indicates that you select <b>New</b> from the File menu.
[ ] (square brackets)	Enclose optional parameters in command syntax.
{ } (curly brackets)	Enclose mandatory parameters in command syntax.
(vertical bar)	Separates mutually exclusive options in command syntax.

# MP-71 Overview

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Trapeze Networks Mobility Point (MP), model MP-71, provides IEEE 802.11b/g wireless access to the network. MP access points are designed for use with a Trapeze Networks Mobility Exchange (MX) switch. MP access points require hardware installation only. All configuration for an MP access point takes place on the MX switch.




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**Warning!** Installation must be performed by qualified service personnel only. Read and follow all warning notices and instructions marked on the product or included in the documentation. Before installing the product, read the [Trapeze Regulatory Information](#) document.

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**Note.** The MP radios are disabled by default and can be enabled only by a system administrator using the MX switch.

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# Features and Benefits

The MP-71 provides the following features and benefits:

- High performance 11 Mbps (802.11b) or 54 Mbps (802.11g) data rate
- Wi-Fi, WPA interoperability
- IEEE 802.11b and 802.11g compliant
- WPA with PSK/TKIP/AES support
- WPA2 support
- IEEE 802.3af (PoE) compliance

# Package Checklist

The MP-71 package includes:

- One MP-71 Mobility Point (MP) access point
- User Guide
- Two reverse polarity SMA antennas

Contact Trapeze Networks if there are any incorrect, missing or damaged parts. If possible, retain the carton, including the original packing materials. Use them again to repack the product in case there is a need to return it.



## External Hardware Overview

Figures 1 and 2 show the external hardware features of the MP-71.

**Figure 1. MP-71 Front View**

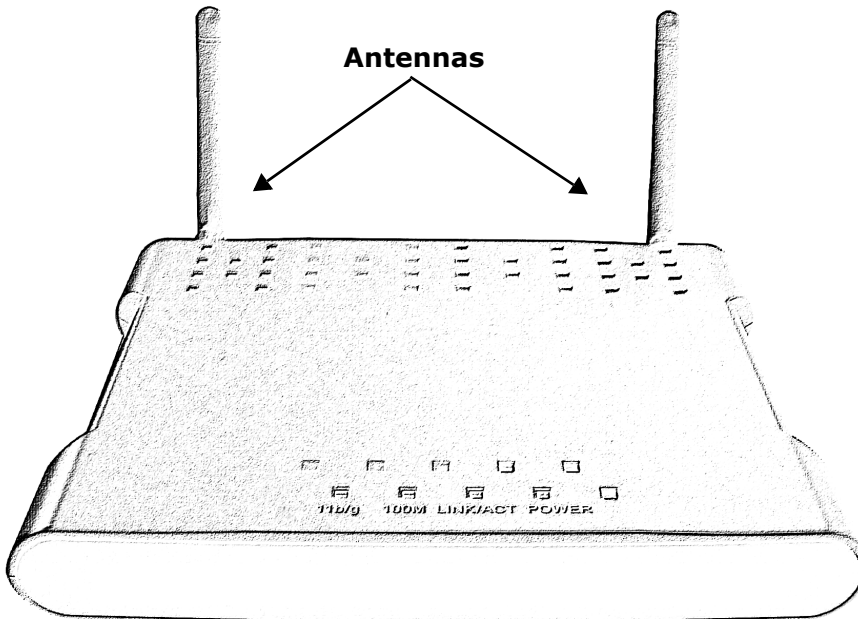


Figure 2. MP-71 Rear View

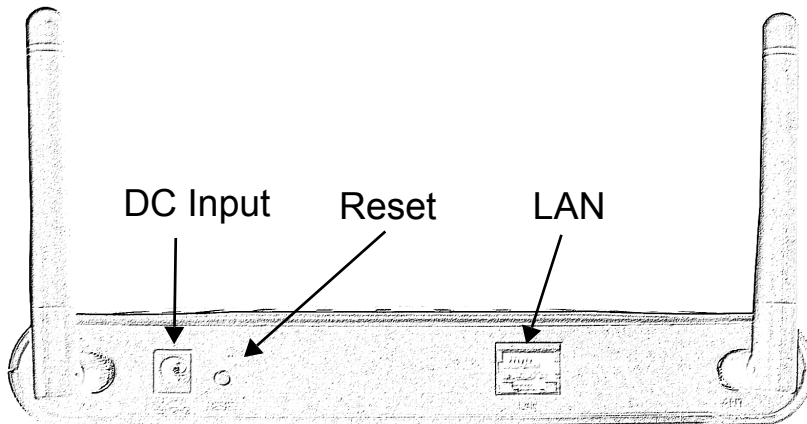
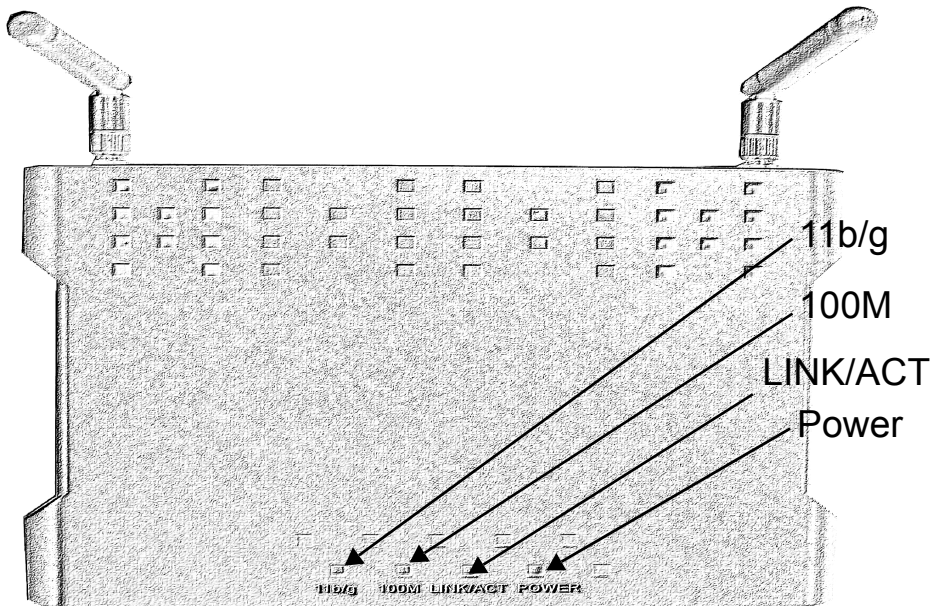


Figure 3. Placement of MP-71 LEDs



**Table 1. LED Descriptions**

Status	802.11b/g	Network	Power
On	Link is activated.	Link is activated.	Power
Off	No wireless connection	No LAN connection	No Power
Blinking	Transmit/Receive Data	Transmit/Receive Data	N/A

## Installation Requirements and Recommendations

For best results, follow these requirements and recommendations before installing an MP-71 access point.

### RingMaster Network Plan and Work Orders

If you are using RingMaster to plan your Trapeze Networks Mobility System installation, you might want to create and verify a network plan for the entire Trapeze network installation and generate an MP work order, before installing MP access points. A network plan and the MP work orders generated from it provide the following information about MP access point installation and configuration:

- Number of MP access points required for adequate WLAN capacity in each coverage area
- Detailed installation location for each MP access point
- Settings for all MP access points in the WLAN

(For information about installing RingMaster, creating and verifying a network plan, and generating an MP work order, see the [Trapeze RingMaster User's Guide](#) and [Trapeze RingMaster Reference Manual](#).)



## MX Switch Recommendation

Trapeze Networks recommends that you install and configure an MX switch before installing an MP access point. If the switch is already installed and configured for the MP access point, you can immediately verify the cable connection when you plug the cable into the MP access point.

## Hardware Connection

### Placing the MP-71

- 1 Locate the MP-71 at the center of your wireless network for better coverage of wireless stations.
- 2 Adjust the direction of the antennas as necessary.

### Connecting the MP-71

- 3 Connect the Ethernet cable to an MX, a PoE, or a PoE mid-span injector.
- 4 Configuration of the MP-71 is performed from an MX or RingMaster.



# Technical Specifications

This chapter lists the technical specifications for the Trapeze Networks MP-71 access point. Table 2 lists the mechanical and compliance specifications. (For detailed compliance information, see the [Trapeze Regulatory Information](#) document.)

(For specifications for the MX switch, see the [Trapeze Mobility Exchange Installation and Basic Configuration Guide](#).)



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**Note.** This Listed Accessory is designed and approved to be used only with Trapeze Networks Mobility Exchange (MX) models.

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**Note.** The MP radios are disabled by default and can be enabled only by the system administrator using the RingMaster management application or the MX switch's command-line interface (CLI).

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**Note.** The radio frequency band, operating channels, and transmit power depend on the country of operation specified by the system administrator using RingMaster or the CLI of MX switch.

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# MP-71 Mechanical and Compliance Specifications

Table 2 lists the mechanical and compliance specifications for the MP-71.

**Table 2. MP-71 Mechanical and Compliance Specifications**

<b>Specification</b>	<b>Description</b>
LAN port	1X RJ-45 10/100 Mbps port with PoE (802.af) support
Power Supply	5V, 2A DC input, requires external power adapter (not supplied) Power over Ethernet (802.3af)
Temperature Range	Operating: 0 to 40 °C (32 - 104°F) Storage: -40 to 80 °C (-40 to 176 °F)
Humidity	10% to 90% (non-condensing)
Modulation Types	802.11g: OFDM 802.11b: CCK
Network Configuration	Infrastructure Mode: 802.11b/g
Operating Frequency	802.11b/g: 2.4 GHz to 2.4835 GHz based on country regulations
Power Injector	Input: 100-240 VAC, 47-63 Hz, 1.5 A Output: 48 VDC, 1.2 A
Physical Size	190.0 x 145.5 x 29.0 mm (7.48 x 5.73 x 1.14 in)
Weight	4.8 kg (10.58 lbs)
EMC Compliance (Class B)	
Radio Certification	China: SRRC Taiwan: DGT Australia/New Zealand: ASIN7 3548 South Korea: MIC



**Table 2. MP-71 Mechanical and Compliance Specifications**

<b>Specification</b>	<b>Description</b>
Safety	UL/cUL60950-1, IEC60950-1 (CB)
Standards	IEEE 802.3 10BASE-T, IEEE 802.3u 100BASE-TX, IEEE 802.11b, IEEE 802.11g



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