

Uploading Firmware to the FMS Using TFTP

Models FMS-X/FMS-XXXX Series
For any firmware version

This guide describes how to upload firmware to the Falcon Facilities Monitoring System (FMS), for any version of firmware, using a TFTP program. You can download a TFTP program from the Internet.

Note: For firmware versions 8.4 and above, you can use the FMS's MIME feature to upload firmware. You can find those instructions on our website.

If you need further assistance, contact RLE Technologies on our website at <http://www.rletech.com/> (go to the **Support Link**) or by calling 970.484.6510, Option 2.



1 Preparing for the Firmware Upload

Before you upload firmware to the FMS, download the following:

- ◆ TFTP program from the Internet. RLE has used tftpd32 and PumpKIN with success:
 - http://tftpd32.jounin.net/tftpd32_download.html (download v3.35, standard edition installer)
 - <http://www.softpedia.com/progDownload/PumpKIN-Download-27103.html> (click the External Mirror 1 link)
- ◆ The FMS firmware file (.bin format) that you want to upload to the FMS. Go to our website at www.rletech.com/resources. Scroll down to the Falcon section on the Resources page.

2 Erasing the Existing Firmware

Before loading the firmware for the Falcon, you must erase the “backup” firmware file from the FMS:

- 1 Use your Web browser to navigate to the IP address for your FMS user interface.
Note: You might need to ask your system administrator for the IP address, system name, and password for the FMS.
- 2 Once the FMS interface is displayed, click the Configuration menu link in the top menu bar, then navigate to the Flash Program Configuration page..

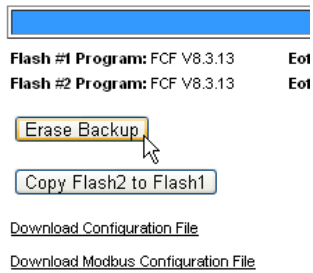


Configuration Menu

- Inputs and Relays
- System
- Alarm Management
- Trends
- Clock
- Schedules
- Battery
- URL Links (1-5)
- URL Links (6-10)
- Links
- Nest/Egg
- Modem/Phone Numbers/Pagers
- Keypad/DTMF Access Users
- Internet Protocol
- User Administration (Web Access)
- Network Statistics
- Icmp Ping
- Email/DNS
- Network Time Protocol
- SNMP/Syslog
- Bacnet
- Com Port1/Modbus/Telnet
- Modbus Slave Units
- [Flash Program](#)
- Product Registration

- 3 Click on the Erase Backup button to erase the backup firmware file in the Falcon.

Erasing the backup makes room for the new firmware file.



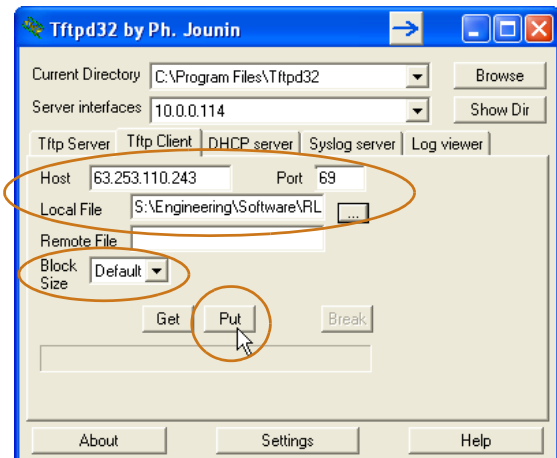
Note: When you erase the backup file, the “active” firmware file is still in place.

- 4 Click OK when prompted to confirm the erasure.
A message displays indicating the flash is being erased.
- 5 If necessary, click the [here](#) link on the message page to go back to the Flash Program Configuration page.

3 Upload the New Firmware

To upload the new firmware to the FMS:

- 1 Run the TFTP program.
- 2 Configure the program window for the firmware upload. For example, if you are using tftpd32, do the following:
 - a Open the tftpd32 program and go to the Tftp Client tab.

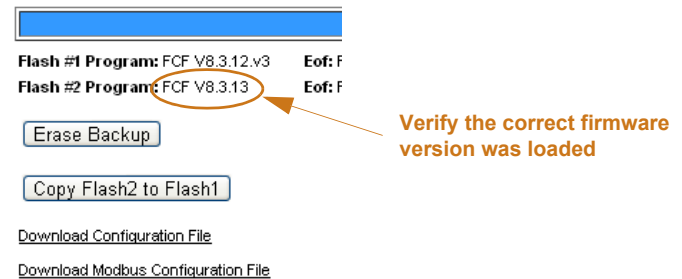


b On the Tftp Client tab, complete the following fields:

- ◆ Host: Enter the IP address of the FMS.
- ◆ Local File: Browse to the location of the FMS firmware file (.bin format) that you downloaded from www.rletech.com/resources.
- ◆ Port: Use port 69.
- ◆ Block Size: Use the default unless your network is relatively slow; then select 128 or 512.

Note: If you use a TFTP program that asks for a firmware file type, select *octet*.

- 3 Once you have completed these fields, click the Put button.
The firmware takes a few minutes to upload to the FMS.
- 4 Refresh the FMS Flash Program page. Verify that the correct firmware was loaded to the Flash #2 Program field.



- 5 If the correct firmware was loaded, click the Copy Flash2 to Flash1 button. This process puts the new firmware into the “active” location.
- 6 The FMS is now running the firmware you just loaded.

©2010 RLE Technologies. All rights reserved. RLE is a registered trademark, and SeaHawk, Falcon, and Raptor are trademarks of RLE Technologies. All other trademarks or registered trademarks are the property of their respective companies. Although the information contained in this document is believed to be accurate and correct, RLE Technologies assumes no responsibility, and disclaims all liability, for any damages resulting from the use of this information or any error or omission in this document. RLE Technologies does not warrant, guarantee, or make any representations as to the performance, fitness for use, safety, or reliability of any existing or future wiring, equipment, additions or modifications to equipment, or any other component of the original or modified system. Specifications are subject to change without notice. Part number 21028 Rev. 2.0 7/2010

104 Racquette Drive
Fort Collins, CO 80524
970.484.6510
www.rletech.com