

# FMS Quick Start Guide



Thank you for purchasing the Falcon FMS. This guide describes how to connect the FMS to the network, configure inputs and system settings, and set up email notification. The FMS User Guide, located at rletech.com, contains additional installation details. Any time you work with printed materials, consult our website first to ensure you have the most recent version of those documents.

If you need further assistance, contact RLE Technologies at support@rletech.com.



v2.3  
(04/2019)



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## Prepare for Installation

Consult your IT administrator and determine the following settings for your FMS:

### Basic Communications

- IP Address \_\_\_\_\_
- Subnet Mask \_\_\_\_\_
- Default Gateway \_\_\_\_\_

### Email Notifications

- Primary DNS \_\_\_\_\_
- Secondary DNS \_\_\_\_\_
- Mail SMTP Address (IP Address or Host Name) \_\_\_\_\_
- Mail Sender Address \_\_\_\_\_
- Mail Recipient Address (Up to 8 Recipients) \_\_\_\_\_

### ESMTP For Email Authentication

- ESMTP User Name \_\_\_\_\_
- ESMTP Password \_\_\_\_\_
- Default Gateway \_\_\_\_\_

## Access the Web Interface

Once all your power connections have been made, you are ready to configure the FMS via the web interface.

1. Plug a crossover cable into the computer that will be used to configure the FMS.

**Note:** This cable is not intended to be connected to a network hub.

2. Connect the other end of the crossover cable to the Ethernet port on the back of the FMS.

**Note:** You can also use the FMS's EIA-232 interface to access the FMS. Refer to the FMS User Guide (available at http://www.rletech.com) for instructions.

3. Write down the computer's current IP address, subnet mask, and default gateway. Change these items temporarily so that the computer can communicate with the FMS.

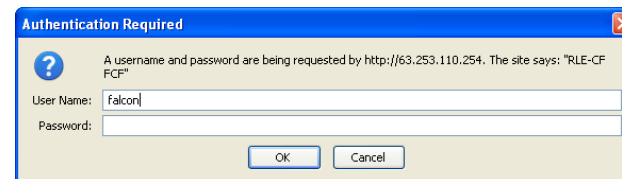
FMS default IP address: 10.0.0.188

FMS default subnet mask: 255.255.255.0

4. Access the FMS through a Web browser by typing the FMS's default IP address (10.0.0.188) into the location bar and pressing Enter.

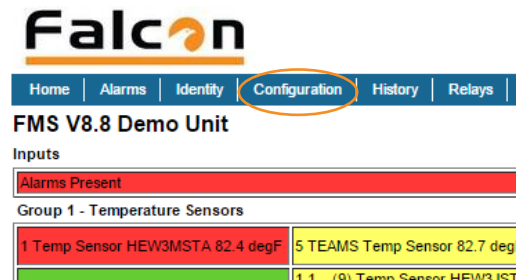
Enter the following:

Default User Name: falcon (case sensitive)

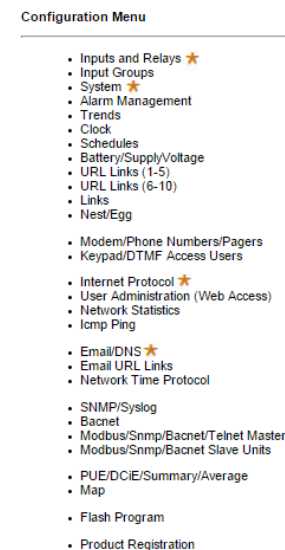


Default Password: (No default password. Leave this field blank.)

5. From the top bar, select the Configuration Menu link. You will select menu options from the Configuration Menu for all configuration tasks described in this guide.



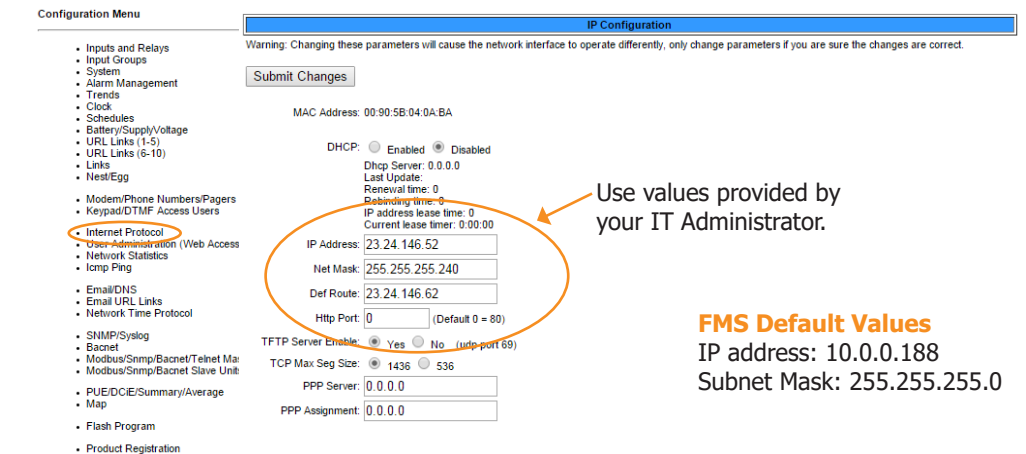
\* You will use these items on the Configuration Menu to complete the tasks described in this quick start guide.



## Configure Network Communications

**IMPORTANT!** Consult your IT administrator before performing these steps.

Click the Internet Protocol link in the Configuration menu to access the IP Configuration page.



1. Enter the values for IP Address, Net Mask (subnet mask), and Def Route (default gateway) provided by your IT administrator.

Once you enter the values and click the Submit Changes button, the FMS saves the changes and reboots. The system status LED on front of the FMS stops flashing.

2. Reset the computer to its original IP address and subnet mask.

**Note:** This step might require assistance from your IT administrator. The computer and the FMS are now both configured to communicate on the network.

3. Connect the computer and the FMS to the network.
4. From the computer's Web browser, go to the new IP address of the FMS.
5. When prompted, enter the user name and password to verify network access to the FMS (as you did in step 4 in the previous section).

If the login window for the FMS does not display:

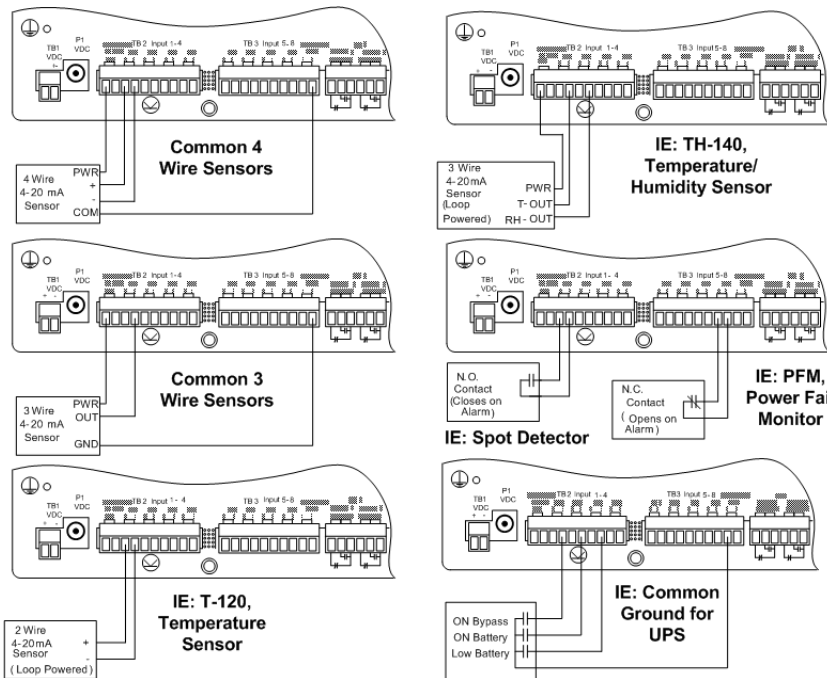
- A. Verify that the cables are firmly attached.
- B. Verify that you entered the correct IP address for the FMS.
- C. Check for activity on the Link and Active LEDs on the front of the FMS as follows:
  - If the Link LED is off, the FMS is not connected to the network. Check the cable connections.
  - If the Active LED is on solid, too much data is being sent to the FMS for it to process. Consult your IT administrator.

## Configure the Inputs

The eight non-isolated universal inputs are connected to TB2 and TB3. Universal input channels can be individually configured through the FMS to monitor a 4-20mA signal, a normally open (NO) dry contact relay, or a normally closed (NC) dry contact relay.

## Make the Physical Connections

The following figure shows examples of input wiring:



Once you have wired the inputs, make note of the following:

- Sensor type (analog or digital) connected to each channel
- For each analog sensor - the high and low alarm thresholds.
- For each digital sensor - the non-alarm state: normally open (NO) or normally closed (NC).

## Configure the Inputs

Use the Inputs and Relays page of the configuration menu to configure the inputs. Click on the underlined label for the input you would like to configure.

Configuration Menu

- Inputs and Relays
- Input Groups
- System
- Alarm Management
- Trends
- Clock
- Schedules
- Battery/Supply/Voltage
- 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
- Email URL Links
- Network Time Protocol
- SNMP/Syslog
- Bacnet
- Modbus/Snmp/Bacnet/Telnet Master
- Modbus/Snmp/Bacnet Slave Units
- PUE/DCE/Summary/Average
- Map
- Flash Program
- Product Registration

S.Ch (#)	Label	S.Ch (#)	Label	S.Ch (#)	Label	S.Ch (#)	Label
1	Temp Sensor RH1	2	Humidity Sensor	3	Temp Sensor RHX	4	Humidity Sensor
5	Temp Sensor RH2	6	Humidity Sensor	7	Temp Sensor RHX	8	Humidity Sensor
9	Temp Sensor RH3	10	Humidity Sensor	11	Temp Sensor RHX	12	Humidity Sensor
13	Temp Sensor RH4	14	Humidity Sensor	15	Temp Sensor RHX	16	Humidity Sensor
17	Temp Sensor RH5	18	Humidity Sensor	19	Temp Sensor RHX	20	Humidity Sensor
21	Temp Sensor RH6	22	Humidity Sensor	23	Temp Sensor RHX	24	Humidity Sensor
25	Temp Sensor RH7	26	Humidity Sensor	27	Temp Sensor RHX	28	Humidity Sensor
29	Temp Sensor RH8	30	Humidity Sensor	31	Temp Sensor RHX	32	Humidity Sensor
33	Temp Sensor RH9	34	Humidity Sensor	35	Temp Sensor RHX	36	Humidity Sensor
37	Temp Sensor RH10	38	Humidity Sensor	39	Temp Sensor RHX	40	Humidity Sensor

(#)	Relay	(#)	Relay	(#)	Relay	(#)	Relay
1	RELAY #1	2	RELAY #2	3	RELAY #3	4	RELAY #4
5	RELAY #5	6	RELAY #6	7	RELAY #7	8	RELAY #8
9	RELAY #9	10	RELAY #10	11	RELAY #11	12	RELAY #12

Alarm Logic
Digital Alarm And Gate #1: Input-A: 0 Input-B: 0

Configuration: Input #1

Current Readings: Raw = 14.948 mA Calc = 80.8

Submit Changes

Select Input type: ANALOG 4-20 MA

Gain: 11.25 Calculator

Offset: 38.75

Hysteresis: 0

UoM/Map Label: degF

Alarm Delay: 0 Seconds

Label: Temp Sensor HEW3MSTA

Physical: High Limit2: 81 (Major) High Limit1: 79 (Minor) Low Limit1: 0 (Minor) Low Limit2: 0 (Major)

Digital Alarm ID: 10 Alarm ID: 13 Alarm ID: 11 Alarm ID: 12 Alarm ID: 14

Relay Configuration: "OR Gate" Relay (1-16) Control: 1 "OR Gate" Relay (17-32) Control: 0

Group Assignment: 1 (1-8) (Temperature Sensors) Digital Alarm Severity: Critical

Email Recipient Notification: 1: rick.stelzer7@gmail.com

Alarm Disable by Schedule: None A B

Input Polarity Reversal by Schedule: None A B (Digital\_NO and Digital\_NC only)

Smp Trap: Enabled Disabled Disabled during Schedule A Disabled during Schedule B

Smp Trap Recipients: 1: 23.24.146.50 2: 23.24.146.51 3: 4

High/Low/1 Smp Traps: Enabled Disabled

Display Value: Signed Unsigned

Individual Ground Type (digital in only): Individual Ground Common Ground

BACnet Instance: all 1 BACnet Units: 0

Map Box Size: W:40 H:150 Text Direction: Vertical

Map Coordinate: X:75 Y:334 Graphical Mapping Test Map

Digital Input Color: Active: Gold Inactive: Gray

- An input can be Analog 4-20 mA or Digital NO, NC, or Status
- Applies only to analog inputs. Gain and offset are used by the FMS to convert temperature, humidity, etc. readings to a 4-20mA signal.
- Applies only to analog inputs. Hysteresis is the amount the reading of an alarming input must change before it's reported as returned to normal.
- Applies only to analog inputs - use Deg F, Deg C, %RH, Amps, Volts, PSI, etc. The UoM field displays on main menu and in alarm notifications.
- The raw reading as reported by the FMS and the calculated value based on the gain and offset settings.
- Applies only to Analog inputs. Set the one or two high and low alarm thresholds to designate the range you would like to monitor.
- The input label displays on the main menu and in the configuration menu.
- This link configures corresponding relay output behavior for this input.

## Configure System Information

Use the System link on the Configuration menu to configure system information.

Configuration Menu

- Inputs and Relays
- Input Groups
- System
- Alarm Management
- Trends
- Clock
- Schedules
- Battery/Supply/Voltage
- 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
- Email URL Links
- Network Time Protocol
- SNMP/Syslog
- Bacnet
- Modbus/Snmp/Bacnet/Telnet Master
- Modbus/Snmp/Bacnet Slave Units
- PUE/DCE/Summary/Average
- Map
- Flash Program
- Product Registration

System Configuration

Submit Changes

MAC Address: 00:99:5B:04:0A:BA

IP Address: 23.24.146.52

System Name: FMS V8.8 Demo Unit

Web Title Bar Text: FMS Demo

Web Refresh Rate: 60 Seconds

PDA Screen Width: 320 Pixels (150-320)

Analog Average: 10 Seconds

Html Main Page: 0 Points

Digital Status Active Color: Green

Html Alarm History Display: And all acknowledgments Or the acknowledgments

Falcon Map Coordinate: X:838 Y:260 Graphical Mapping

Default URL: Home Page

Button Controlled Relay Password: relay

Graph Type: Dy Graph

Exit To Bootloader

- The system name appears on the FMS main menu and is included as part of email and pager notifications.
- The rate at which the web pages refresh within the browser. Use a number greater than 5.
- Designate the number of points you'll display on the main menu. Typically users enter 0 here to display all points.

## Configure Email Notification

Configuration Menu

- Inputs and Relays
- Input Groups
- System
- Alarm Management
- Trends
- Clock
- Schedules
- Battery/Supply/Voltage
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- Modbus/Snmp/Bacnet Slave Units
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- Product Registration

E-Mail Configuration

Submit Changes

Access Type: None LAN PPP

Primary DNS Server: 75.75.75.75

Secondary DNS Server: 75.75.76.76

Alternate Smp Port: 25 (0 - Use default port 25)

Mail (SMTP) Server: aspmx.l.google.com

Mail Sender Address: rletechnologies@gmail.com

Mail Subject: Alarm at RLE Main Office

Mail Recipient (1): rletechnologies@gmail.com

Mail Recipient (2): rletechnologies@gmail.com

Mail Recipient (3): rletechnologies@gmail.com

Mail Recipient (4): rletechnologies@gmail.com

Mail Recipient (5): rletechnologies@gmail.com

Mail Recipient (6): rletechnologies@gmail.com

Mail Recipient (7): rletechnologies@gmail.com

Mail Recipient (8): rletechnologies@gmail.com

Email Message Strip TimeStamp: Append Falcon link to message: Append Falcon password to link:

Smtp Authentication: None Plain Login (Do not enable this unless instructed by your ISP or IT dept)

Smtp Username: rletechnologies@gmail.com Smtp Password: \*\*\*\*\*

Email Heartbeat: Disabled

Email Heartbeat Time: (HH:MM)

Email Heartbeat Recipient Notification: 1: rick.stelzer7@gmail.com 2: 3: 4: 5: 6: 7: 8:

Alarm History Entries: 258 Emails sent, 2 Emails unsent, 0

Last Email Heartbeat Time: (Since bootup or dty change)

Mail Server DNS address logged for: "aspmx.l.google.com" 74.125.202.27

Mail Server DNS TTL: 301

Mtp Server DNS address logged for: "mtp.post.org" 187.170.118.75

Mtp Server DNS TTL: 3

View Smpx Log

- Refer to the information you collected from your IT administrator.
- Select subject text that you will easily recognize as notification from the FMS.
- Enter up to eight email recipients - either individual email addresses or distribution lists.
- This information is used for ESMTMP email authentication. Refer to the information you collected from your IT administrator.

## Complete the Installation

Once you have completed the tasks in this quick start guide, the FMS can communicate over the network and monitor the inputs you configured. Consult the FMS User Guide at <http://www.rletech.com> for information about completing these additional tasks:

- System clock settings
- Network time protocol settings
- SNMP/Syslog settings
- Modbus/Telnet settings
- BACnet settings
- User administration
- URL links to IP-addressable devices
- Nest/Egg configuration (for additional FMS appliances that will be monitored by a central FMS appliance)
- Trends
- Alarm management
- Product registration