Falcon MIB Files

If a Network Management System (NMS) is used with the Falcon, then the Falcon's MIB (Management Information Base) files will have to be imported into the NMS software.

The MIB files define the information available using SNMP Get/Set commands. Information such as input high/low limits, schedules and data history logs are available to the Network Management System (NMS).

The MIB files also define the SNMP Traps and the format of the Traps. SNMP Traps are another form of notification. SNMP Traps are sent to the NMS. Typically, the NMS can then change the color of the Falcon icon on the NMS monitor, log the event and forward notification via its own email, pager, text message etc.

In general, the Falcon's MIB files are backwards compatible per version.

Falcon 8000/2000 Series
Contact RLE's technical support at support@rletech.com with your Falcon model number and firmware version.

Falcon FMS8, FMS20, FMS20U and FMS32
The Falcon's MIB files are: "Falcon8A(4.0).MIB", "Falcon32(6.6).MIB" and "FalconTraps32v(6.6).MIB".

The Falcon8A(4.0).MIB is only required for systems with a FMS20U.
The Falcon32(6.6).MIB is only required for systems with a FMS8, FMS20, and/or FMS32.
The FalconTraps32v(6.6).MIB is required when the Falcon "Trap Type" on the system configuration page is set to "falconPortTraps".

The Falcon has an option to select the Trap format. The system configuration page has an "Analog Trap Type" selection. Selecting "Value\UOM\Label" will determine the Trap variables as shown below. Selecting the "Label Only" option will set the Falcon to remove the input reading and UOM information from the Trap. The purpose of which is to make the number of variables in an analog input Trap the same as a digital input Trap – which may make it easier to configure the NMS.

The following Traps are enabled when the "Trap Type" is set to "AlarmEntryAdded" under the system configuration page:

- falconAlarmEntryAdded
- falconAlarmEntryRemoved
- falconAccessGranted
- falconAccessDenied
- falconPageUnsuccessful

The following Traps are enabled when the "Trap Type" is set to "falconPortTraps" under the system configuration page:

- falconAccessGranted
- falconAccessDenied
- falconPageUnsuccessful
- falconPort01Trap to falconPort104Trap
- falconPort01TrapClear to falconPort104TrapClear

Below lists the Traps and their contents (variables):

Trap Type:	**Contents:**
falconAlarmEntryAdded:	Alarm ID/Alarm Description/Input Reading/UOM/Label
falconAlarmEntryRemoved:	Alarm ID/Alarm Description/Input Reading/UOM/Label
falconAccessGranted:	Keypad username
falconAccessDenied:	<no additional information included in the Trap>
falconPageUnsuccessful:	<no additional information included in the Trap>
falconPort(01-32)Trap:	Alarm ID/Alarm Description/Input Reading/UOM/Label
falconPort(01-32)TrapClear:	Alarm ID/Alarm Description/Input Reading/UOM/Label

Alarm ID — This number starts at 1 and increments by 1 whenever a new alarm occurs. When the alarm returns to normal, the alarm ID will be the same number as when the alarm occurred. The intent is to make sure that each new alarm causes a unique Trap to be sent. This ensures the NMS will see the Trap since some NMSs can be configured to ignore duplicate Traps.

Example:
Input 5 alarms, Trap sent out with alarm ID = 1
Input 19 alarms, Trap sent out with alarm ID = 2
Input 5 returns to normal, Trap sent out with alarm ID = 1
Input 1 alarms, Trap sent out with alarm ID = 3
Input 1 returns to normal, Trap sent out with alarm ID = 3
Input 19 returns to normal, Trap sent out with alarm ID = 2

Alarm Description — This field contains the input alarm description. It will be one of the following (where X = input number 1-32):

- falconInputXDigAlarm
- falconInputXHighAlarm
- falconInputXLowAlarm
- falconInputXHigh2Alarm
- falconInputXLow2Alarm.

Label — This field is the same as the contents of the user's label field on the Falcon's input configuration page.

Input Reading — This is the current value of the input. Not included for inputs set for "Digital" or "Status", or when "AnalogVarType" is set for "Label Only".

UOM — This is the "Unit of Measure" as entered on the input configuration page. Not included for inputs set for "Digital" or "Status" or when "AnalogVarType" is set for "Label Only".

FLS8 / FLS8-M – "Falcon Lite"
The Falcon FLS8 and FLS8-M MIB file is "FalconLite(2.2).MIB".

The Falcon Lite has an option to select the Trap format. The system configuration page has an "Analog Trap Type" selection. Selecting "Value\UOM\Label" will determine the Trap variables as shown below. Selecting the "Label Only" option will set the Falcon to remove the input reading and UOM information from the Trap. The purpose of which is to make the number of variables in an analog input Trap the same as a digital input Trap – which may make it easier to configure the NMS.

Below lists the Traps and their contents (variables):

> **NOTE:** The alarm ID starts at 1 and increments by 1 whenever a new alarm occurs. When the alarm returns to normal, the alarm ID will be the same number as when the alarm occurred. The intent is to make sure that each new alarm causes a unique Trap to be sent. This ensures the NMS will see the Trap since some NMSs can be configured to ignore duplicate Traps.

falconLitePort01Trap: Alarm ID, Alarm Description, Input Reading, UOM and Label

Alarm ID — See **"NOTE"** above.

Alarm Description — falconLiteInput1HighAlarm, falconLite1High2Alarm, falconLite1LowAlarm or falconLite1Low2Alarm.

Input Reading — This is the current value of the internal temperature sensor. Not included when "AnalogVarType" is set for "Label Only".

UOM — This is the "Unit of Measure" the user assigned to the internal temperature sensor. Not included when "AnalogVarType" is set for "Label Only".

Label — This is the same as the contents of the user's label field for the internal temperature sensor.

falconLitePort02Trap: Alarm ID, Alarm Description, Input Reading, UOM and Label

Alarm ID — See **"NOTE"** on page 2.

Alarm Description — falconLiteInput2HighAlarm, falconLite2High2Alarm, falconLite2LowAlarm or falconLite2Low2Alarm.

Input Reading — This is the current value of the internal humidity sensor. Not included when "AnalogVarType" is set for "Label Only".

UOM — This is the "Unit of Measure" the user assigned to the internal humidity sensor. Not included when "AnalogVarType" is set for "Label Only".

Label — This is the same as the contents of the user's label field for the internal humidity sensor.

falconLitePort03Trap: Alarm ID, Alarm Description, Input Reading, UOM and Label

Alarm ID — See **"NOTE"** page 2.

Alarm Description — falconLiteInput3HighAlarm, falconLite3High2Alarm, falconLite3LowAlarm or falconLite3Low2Alarm.

Input Reading — This is the current value of input #3 (TB2 pins 1 and 2). Not included when "AnalogVarType" is set for "Label Only".

UOM — This is the "Unit of Measure" the user assigned to input #3. Not included when "AnalogVarType" is set for "Label Only".

Label — This is the same as the contents of the user's label field for input #3.

falconLitePort04Trap: Alarm ID, Alarm Description, Input Reading, UOM and Label

Alarm ID — See **"NOTE"** page 2.

Alarm Description — falconLiteInput4HighAlarm, falconLite4High2Alarm, falconLite4LowAlarm or falconLite4Low2Alarm.

Input Reading — This is the current value of input #4 (TB2 pins 4 and 5). Not included when "AnalogVarType" is set for "Label Only".

UOM — This is the "Unit of Measure" the user assigned to input #4. Not included when "AnalogVarType" is set for "Label Only".

Label — This is the same as the contents of the user's label field for input #4.

falconLitePort05Trap: Alarm ID, Alarm Description and Label

Alarm ID — See **"NOTE"** page 2.

Alarm Description — falconLiteInput5DigAlarm.

Label — This is the same as the contents of the user's label field for input #5.

falconLitePort06Trap: Alarm ID, Alarm Description and Label

Alarm ID — See **"NOTE"** page 2.

Alarm Description — falconLiteInput6DigAlarm.

Label — This is the same as the contents of the user's label field for input #6.

falconLitePort07Trap: Alarm ID, Alarm Description, Label

Alarm ID — See **"NOTE"** page 2.

Alarm Description — falconLiteInput7DigAlarm.

Label — This is the same as the contents of the user's label field for input #7.

falconLitePort08Trap: Alarm ID, Alarm Description and Label

Alarm ID — See **"NOTE"** page 2.

Alarm Description — falconLiteInput8DigAlarm.

Label — This is the same as the contents of the user's label field for input #8.

falconLitePort01TrapClear: Alarm ID, Alarm Description, Input Reading, UOM and Off Label

Alarm ID — See **"NOTE"** page 2.

Alarm Description — falconLiteInput1HighAlarm, falconLite1High2Alarm, falconLite1LowAlarm or falconLite1Low2Alarm.

Input Reading — This is the current value of the internal temperature sensor. Not included when "AnalogVarType" is set for "Label Only".

UOM — This is the "Unit of Measure" the user assigned to the internal temperature sensor. Not included when "AnalogVarType" is set for "Label Only".
Off Label — This is the same as the contents of the user's off label field for the internal temperature sensor.

falconLitePort02TrapClear: Alarm ID, Alarm Description, Input Reading, UOM and Off Label

Alarm ID — See **"NOTE"** page 2.

Alarm Description — falconLiteInput1HighAlarm, falconLite1High2Alarm, falconLite1LowAlarm or falconLite1Low2Alarm.

Input Reading — This is the current value of the internal humidity sensor. Not included when "AnalogVarType" is set for "Label Only".

UOM — This is the "Unit of Measure" the user assigned to the internal humidity sensor. Not included when "AnalogVarType" is set for "Label Only".

Off Label — This is the same as the contents of the user's off label field for the internal humidity sensor.

falconLitePort03TrapClear: Alarm ID, Alarm Description, Input Reading, UOM and Off Label

Alarm ID — See **"NOTE"** page 2.

Alarm Description — falconLiteInput3HighAlarm, falconLite3High2Alarm, falconLite3LowAlarm or falconLite3Low2Alarm.

Input Reading — This is the current value of input #3 (TB2 pins 1 and 2). Not included when "AnalogVarType" is set for "Label Only".

UOM — This is the "Unit of Measure" the user assigned to input #3. Not included when "AnalogVarType" is set for "Label Only".

Off Label — This is the same as the contents of the user's off label field for input #3.

falconLitePort04TrapClear: Alarm ID, Alarm Description, Input Reading, UOM and Off Label

Alarm ID — See **"NOTE"** page 2.

Alarm Description — falconLiteInput4HighAlarm, falconLite4High2Alarm, falconLite4LowAlarm or falconLite4Low2Alarm.

Input Reading — This is the current value of input #4 (TB2 pins 4 and 5). Not included when "AnalogVarType" is set for "Label Only".

UOM — This is the "Unit of Measure" the user assigned to input #4. Not included when "AnalogVarType" is set for "Label Only".

Off Label — This is the same as the contents of the user's off label field for input #4.

falconLitePort05TrapClear: Alarm ID, Alarm Description and Off Label

Alarm ID — See **"NOTE"** page 2.

Alarm Description — falconLiteInput5DigAlarm.

Off Label — This is the same as the contents of the user's off label field for input #5.

falconLitePort06TrapClear: Alarm ID, Alarm Description, and Off Label

Alarm ID — See **"NOTE"** page 2.

Alarm Description — falconLiteInput6DigAlarm.

Off Label — This is the same as the contents of the user's off label field for input #6.

falconLitePort07TrapClear: Alarm ID, Alarm Description and Off Label

Alarm ID — See **"NOTE"** page 2.

Alarm Description — falconLiteInput7DigAlarm.

Off Label — This is the same as the contents of the user's off label field for input #7.

falconLitePort08TrapClear: Alarm ID, Alarm Description, and Off Label

Alarm ID — See **"NOTE"** page 2.

Alarm Description — falconLiteInput8DigAlarm.

Off Label — This is the same as the contents of the user's off label field for input #8.

FMS-X/FMS-XXXX, FLS-X-X-X Series Falcons
The Falcon MIB files are "FMS-XXXX(v7.1c).MIB" and "FMS-Modbus-BCM(v7.3).MIB". The FMS-Modbus-BCM(v7.3).MIB file is only required when the Falcon has the "M" expansion card for Modbus master communications.

The Falcon has an option to select the Trap format. The SNMP configuration page has an "Analog Trap Type" selection. Selecting "Value\UOM\Label" will determine the Trap variables as shown below. Selecting the "Label Only" option will set the Falcon to remove the input reading and UOM information from the Trap. The purpose of which is to make the number of variables in an analog input Trap the same as a digital input Trap – which may make it easier to configure the NMS.

The following Traps are enabled when the "Trap Type" is set to "AlarmEntryAdded" under the SNMP configuration page:

- falconAlarmEntryAdded
- falconAlarmEntryRemoved
- falconAccessGranted
- falconAccessDenied
- falconPageUnsuccessful

The following Traps are enabled when the "Trap Type" is set to "falconPortTraps" under the SNMP configuration page:

- falconAccessGranted
- falconAccessDenied
- falconPageUnsuccessful
- falconPort01Trap to falconPort104Trap
- falconTemperatureSensorTrap
- falconHumiditySensorTrap
- falconPort01TrapClear to falconPort104TrapClear
- falconTemperatureSensorTrapClear
- falconHumiditySensorTrapClear

Below lists the Traps and their contents (variables):

Trap Type:	**Contents:**
falconAlarmEntryAdded:	Alarm ID/Alarm Description/Label/Input Reading/UOM
falconAlarmEntryRemoved:	Alarm ID/Alarm Description/Label/Input Reading/UOM
falconAccessGranted:	Keypad username
falconAccessDenied:	<no additional information included in the Trap>
falconPageUnsuccessful:	<no additional information included in the Trap>
falconPort(01-104)Trap:	Alarm ID/Alarm Description/Label/Input Reading/UOM
falconTemperatureSensorTrap:	Alarm ID/Alarm Description/Label/Input Reading/UOM
falconHumiditySensorTrap:	Alarm ID/Alarm Description/Label/Input Reading/UOM
falconPort(01-104)TrapClear:	Alarm ID/Alarm Description/Label/Input Reading/UOM
falconTemperatureSensorTrapClear:	Alarm ID/Alarm Description/Label/Input Reading/UOM
falconHumiditySensorTrapClear:	Alarm ID/Alarm Description/Label/Input Reading/UOM

Alarm ID — This number starts at 1 and increments by 1 whenever a new alarm occurs. When the alarm returns to normal, the alarm ID will be the same number as when the alarm occurred. The intent is to make sure that each new alarm causes a unique Trap to be sent. This ensures the NMS will see the Trap since some NMSs can be configured to ignore duplicate Traps.

Example:
Input 5 alarms, Trap sent out with alarm ID = 1
Input 19 alarms, Trap sent out with alarm ID = 2
Input 5 returns to normal, Trap sent out with alarm ID = 1
Input 1 alarms, Trap sent out with alarm ID = 3
Input 1 returns to normal, Trap sent out with alarm ID = 3
Input 19 returns to normal, Trap sent out with alarm ID = 2

Alarm Description — This field contains the input alarm description. It will be one of the following (where X = input number 1-104):

- falconInputXDigAlarm
- falconInputXHighAlarm
- falconInputXLowAlarm
- falconInputXHigh2Alarm
- falconInputXLow2Alarm
- falconTemperatureSensorHighAlarm
- falconTemperatureSensorLowAlarm
- falconTemperatureSensorHigh2Alarm
- falconTemperatureSensorLow2Alarm.

NOTE: The "falconTemperatureSensorAlarms" and "falconHumiditySensorAlarms" refer to the optional internal temperature and humidity sensor. It does not refer to any temperature/humidity sensors that are wired to the Falcon inputs.

Label — This is the same as the contents of the user's label field or the label (digital input normal) field on the Falcon input configuration page as described below:

- Trap type = AlarmEntryAdded
  AlarmEntryAdded Trap = label field
  Analog AlarmEntryRemoved Trap and input = label field
  Digital AlarmEntryRemoved Trap and input = label (digital input normal) field

- Trap type = falconPortTraps
  falconPort(1-104)Trap = label field
  falconPort(1-104)TrapClear = label field

Input Reading — This is the current value of the input. Not included for inputs set for "Digital" or "Status" or when "AnalogVarType" is set for "Label Only".

UOM — This is the "Unit of Measure" as entered on the input configuration page. Not included for inputs set for "Digital" or "Status" or when "AnalogVarType" is set for "Label Only".9999