CTC Union Technologies

NMC-R3 (FRM220)
Release Notice

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NMC-R3 Release Notice

Date : May 17, 2023

This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.65

Version:

NMC-R3 v.5.65 [17/5/2023] MIB version 2.61

<u>Enhanced Features:</u>

1. Added new rule to private recall get function fail from 2000EAS/2000M, and next polling run will read those fail value until all value recall successfully.

<u>Modifications:</u>

1. Modify the maximum SNMP get-bulk max receptions is allow 40, the maximum Non repeaters is allow 20, to private user configure too many receptions to cause device hanged.
2. Modify CH04A console/telnet alarm2 default setting is disable.
3. Modify 10G-3R/4G-3R/16G-3R card is allow separate configure Rx Power Status Trap & LOS assert Alarm.

<u>Fix:</u>

1. Fixed 2000EAS/2000M series line card after recalled but doesn't store card type to cause replaced NMC card default the line card.
2. Fixed E1/T1 Card log Signal base on E1/T1 Mode configuration.
3. Fixed 2000m series line card , while MAC address with "FA", and the version will be display abnormal.

<u>Known Issues:</u>

1. FRM220A-2000EAS-2F should be release version 1.011 or above.

NMC-R3 Release Notice

Date : April 24, 2023

This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.64

Version:

NMC-R3 v.5.64 [24/4/2023] MIB version 2.61

Enhanced Features:

1. Improve FRM220-TM-10GMUX judge mechanism.
2. Judge 10G-SXX show serial number only under WTT version.
3. Add FRM220-GFOM04/08 Remote record mechanism.
4. Add FRM220-GFOM04/08 Upgrade remote side FW function via Telnet and Console.
5. Add new judgement--While both OP1 & OP2 of GFOM04/08 link down, and remote disable will be priority first.
6. MIB file updated to V2.61.

Modifications:

1. Support new Line card FRM220-2000EAS-2F.
2. Modify FRM220-GFOM04/08 configure remove device Active always Enable.
3. Remove FRM220-GFOM04/08 upgrade remote side FW function via Local.
4. Modified FRM220-GFOM04/08 of signal loss alarm log message type according to the E1/T1 mode setting.

Fix:

1. Fixed FRM220-GFOM04/08 doesn't record remote side of UTP and E1/T1 parameters issue.
2. Fixed FRM220-GFOM04/08 CID judge mechanism

Known Issues:

1. FRM220A-2000EAS-2F should be release version 1.011 or above.

NMC-R3 Release Notice

Date : December 14, 2022

This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.63

Version:

NMC-R3 v.5.63 [106/21/2022] MIB version 2.60

Enhanced Features:

1. Added FRM220-2000M serial number display, but currently unable to write serial number from NMC (Line needs to be updated)
2. MIB file updated to V2.60.

Modifications:

1. Added VLAN mode function settings under NMC for the FRM220-2000M series.

Fix:

1. Fixed the issue where the displayed contents of CWMD81A-2759 and CWMD81B-2961 were reversed.
2. Fixed the error in FXS-4 model name display.
3. Fixed the display error in the FRM220A-2000EAS Telnet/Console under LACP.

Known Issues:

1. 4G-3R should be f/w v1.004; 10G-3R should be f/w v1.103 or above, 16G-3R should be f/w v1.007 or above
2. FRM220A-2000EAS should be release version 1.008 or above
3. There are known issues that some CWDM Mux/Demux may not show the correct channel wavelengths or upgrade port frequencies. Please refer to the original specifications of the card for the correct wavelengths. This issue is with the card's firmware and not the NMC.
4. FRM220-2000MS should upgrade to version 1.003 or above

NMC-R3 Release Notice

Date : July 15, 2022

This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.62

Version:

NMC-R3 v.5.62 [06/20/2022] MIB version 2.59

<u>Enhanced Features:</u>

1. Added 2000EAS console/telnet menu.
2. Added Signal Loss and Sync Loss settings for console/telnet alarm. (Originally only available on Web)
3. Added Fan 1 type and Fan 2 type settings in CH20 for console/telnet alarm (originally only on Web)

<u>Modifications:</u>

1. Modified the 2000EAS-1 log/trap/web to display Remote (originally displayed RemoteA).
2. Modified MSTI, where MST2~7 path cost could not be set by Web.

<u>Fix:</u>

1. Corrected the display and setting of CH20 for Fan 1 type and Fan 2 type (originally each CH04A, CH08, CH20 had this setting)
2. Fixed the polling issue with 1000DS card causing management disconnect/connect.

<u>Known Issues:</u>

1. 4G-3R should be f/w v1.004; 10G-3R should be f/w v1.103, 16G-3R should be f/w v1.007
2. FRM220A-2000EAS should be release version 1.008 or above
3. There are known issues that some CWDM Mux/Demux may not show the correct channel wavelengths or upgrade port frequencies. Please refer to the original specifications of the card for the correct wavelengths. This issue is with the card's firmware and not the NMC.
4. FRM220-2000MS should upgrade to version 1.002

NMC-R3 Release Notice

Date : May 24, 2022

This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.61

Version:

NMC-R3 v.5.61 [05/16/2022] MIB version 2.59

Enhanced Features:

1. Added to NMC, allow 2000eas to ping, allow MGMT, MAC Learning function settings.
2. Added Ingress Tag Pop Count. Due to the difference between the old and new VLAN formats of 2000EAS, the setting value may be wrong.
3. Added Line Card FRM220-DWMX1601-C21C36, FRM220-DWDX1601-C21C36.
4. Added Line Card FRM220-2000M series (need to use the latest FW of Line Card).
5. Remove FRM220-MD, FRM220-OADM Series, FRM220-DWDM from the Upgrade line card menu.
6. MIB File updated to V2.59.

Modifications:

1. Modify 2000EAS WEB GUI Port duplex to display Yes->Full, No-> Half.
2. Modify the Japanese translation of the WEB part.
3. Modify the description of 2000eas vlan Egress Tagged field.
4. Modify the display mode of FW version for 2000eas Line Card value, need to reset the VLAN part or do Default setting. (Requires the latest version of Line Card)
5. The function setting will display the latest version interface no matter the version of 2000eas line card.
6. Modify the number of polling slots in the NMC according to the racks 02, 04, 08 (originally: Polled 19 slots for any rack)

Fix:

1. Fixed the display error of Port VLAN setting Port Allowed VLANs when f2000eas vlan mode is access.
2. Fixed the problem of local/remote card drop when f1000MS is connected to remote (modify the card detection mechanism)

Known Issues:

1. 4G-3R should be f/w v1.004; 10G-3R should be f/w v1.103, 16G-3R should be f/w v1.007
2. FRM220A-2000EAS should be release version 1.008 or above
3. There are known issues that some CWDM Mux/Demux may not show the correct channel wavelengths or upgrade port frequencies. Please refer to the original specifications of the card for the correct wavelengths. This issue is with the card's firmware and not the NMC.
4. If using FRM220A-2000EAS series, delete the browser cookies after upgrading to 5.60.
5. FRM220-2000MS should upgrade to version 1.001

NMC-R3 Release Notice

Date : December 20, 2021
This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.60

Version:
NMC-R3 v.5.60 [12/09/2021] MIB version 2.57

Enhanced Features:
None

Modifications:
1. Finished modifications to match FRM220A-2000EAS line cards
a. Modify VLAN setting. (Removed Port Forbidden VLAN setting, add Egress Selective Tagged setting)
b. Modify 2000EAS Web page width 768 -> 900. (Lower than V5.60 have to clean cookie after doing upgrade procedure)
c. Add SFP & D/D information on port status of 2000EAS
d. Modify "OAM enable or disable", remote side will be dimmed
e. Remove Save Startup-Config button on 2000EAS
f. Because the 2000EAS VLAN format is different between current & previous version, wrong parameters may appear. NMC will request to either re-configure VLAN settings or do default settings.
2. MIB File upgrade to V2.57

Fix:
1. Fix fiber speed configure option disappear issue on 1000EAS/X, line card f/w V1.044.

Known Issues:
1. 4G-3R should be f/w v1.004; 10G-3R should be f/w v1.103, 16G-3R should be f/w v1.007
2. FRM220A-2000EAS should be release version 1.004 or above
3. There are known issues that some CWDM Mux/Demux may not show the correct channel wavelengths or upgrade port frequencies. Please refer to the original specifications of the card for the correct wavelengths. This issue is with the card's firmware and not the NMC.
4. If using FRM220A-2000EAS series, delete the browser cookies after upgrading to 5.60.

NMC-R3 Release Notice

Date : October 20, 2021
This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.59

Version:
NMC-R3 v.5.59 [10/08/2021] MIB version 2.56

Enhanced Features:
1. Add Web Refresh button, f2000eas series
2. Add Port Alarm Setting for f2000eas series
3. Add the Accept Remote H/W Reset setting on the f2000eas card Remote terminal, but not Local
4. Add f2000eas card Remote (A/B) H/W Reset button

Modifications:
1. Modified the chassis power display
   - AC90-250V changed to AC
   - DC36-75V changed to DC48V
   - DC changed to DC24V
2. Modify Model Name FRM220-2000EAS to FMR220A-2000EAS
3. MIB File updated to V2.56

Fix:
1. Fixed the problem where CH04A Power OFF will send trap twice
2. Fixed the problem of displaying the grayed-out part of f2000eas card vlan trunk in the Egress Tagging setting of Ingress Acceptance
3. Fix f2000eas card vlan display problem in the inverted gray part of access mode Egress Tagging

Known Issues:
1. 4G-3R should be f/w v1.004; 10G-3R should be f/w v1.103, 16G-3R should be f/w v1.007
2. FRM220A-2000EAS should be release version 1.004 or above
3. There are known issues that some CWDM Mux/Demux may not show the correct channel wavelengths or upgrade port frequencies. Please refer to the original specifications of the card for the correct wavelengths. This issue is with the card's firmware and not the NMC.

NMC-R3 Release Notice

Date : September 1, 2021

This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.58

Version:

NMC-R3 v.5.58 [08/18/2021] MIB version 2.55

<u>Enhanced Features:</u>

1. Add 2000EAS inventory display (need to match line card FW V1.004).

<u>Modifications:</u>

1. Modify the 2000eas card polling method to improve polling time
2. Added Remote Power status and Remote Power fail trap. (Requires Line Card FW V1.004)
3. Removed the Time of Last Loop display in f2000eas Loop protection status.
4. The MIB version is updated to V2.55.
5. NMC other polling performance enhancements (chassis setting, get_cid, chassis alarm, chassis trap) reduced to 6 seconds

<u>Fix:</u>

1. Correct the display of SNMP/MIB Fiber Speed status (the original 1000Base-TX is changed to 1G)
2. Fix the problem of Egress Units (kbps/mbps) setting.
3. Fixed the problem that DWDM801 cannot update FW.

<u>Known Issues:</u>

1. 4G-3R should be f/w v1.004; 10G-3R should be f/w v1.103, 16G-3R should be f/w v1.007
2. FRM220A-2000EAS should be release version 1.004

3. There are known issues that some CWDM Mux/Demux may not show the correct channel wavelengths or upgrade port frequencies. Please refer to the original specifications of the card for the correct wavelengths. This issue is with the card's firmware and not the NMC.

NMC-R3 Release Notice

Date : July 12, 2021
This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.57

Version:
NMC-R3 v.5.57 [07/12/2021] MIB version 2.54

Enhanced Features:
None

Modifications:
1. Modify 2000EAS polling mode.
2. Modify 2000EAS setting value can be stored in NMC.
3. Modify that save cannot be pressed when the 2000EAS series has not read all the states.
4. Modify 2000EAS series QoS FlowControl to Burst Size.
5. Update MIB File to V2.54.

Fix:
None

Known Issues:
1. 4G-3R should be f/w v1.004; 10G-3R should be f/w v1.103, 16G-3R should be f/w v1.007
2. FRM220A-2000EAS should be release version 1.003

3. There are known issues that some CWDM Mux/Demux may not show the correct channel wavelengths or upgrade port frequencies. Please refer to the original specifications of the card for the correct wavelengths. This issue is with the card's firmware and not the NMC.

NMC-R3 Release Notice

Date : July 12, 2021
This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.56

Version:
NMC-R3 v.5.56 [06/28/2021] MIB version 2.53

<u>Enhanced Features:</u>
1. Added FRM220A-2000EAS Series cards
2. Added DWDM 4 channel card FRM220-DWDM401-C21-C24
3. Added DWDM 8 channel card FRM220-DWDM801-C21-C28

<u>Modifications:</u>
1. MIB file updated to version 2.53
2. Removed support for SDI and HDSDI from 4G-3R, 10G-3R and 16G-3R transponders.

<u>Fix:</u>
1. Fixed FRM220A-1000EAS/X error reading SNMP MIB variable f1000EASXOamDupEvtChARx for local and remote devices.

<u>Known Issues:</u>
1. 4G-3R should be f/w v1.004; 10G-3R should be f/w v1.103, 16G-3R should be f/w v1.007

2. There are known issues that some CWDM Mux/Demux may not show the correct channel wavelengths or upgrade port frequencies. Please refer to the original specifications of the card for the correct wavelengths. This issue is with the card's firmware and not the NMC.

NMC-R3 Release Notice

Date : May 19, 2021

This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.55

Version:

NMC-R3 v.5.55 [05/03/2021] MIB version 2.52

<u>Enhanced Features:</u>

None

<u>Modifications:</u>

None

<u>Fix:</u>

1. When FRM220-NMC-R3 is installed in FRM220-CH02-SMT, the factory default Fan control is "Auto". However, if NMC is set by user to default, the Fan control becomes "Level3". This fixes the issue so that the default will be "Level3" from factory or user default. This update should be applied at the same time as a FRM220-CH02-SMT firmware upgrade to version 2.1.

<u>Known Issues:</u>

1. There are known issues that some CWDM Mux/Demux may not show the correct channel wavelengths or upgrade port frequencies. Please refer to the original specifications of the card for the correct wavelengths. This issue is with the card's firmware and not the NMC.

NMC-R3 Release Notice

Date : April 13, 2021

This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.54

Version:

NMC-R3 v.5.54 [04/08/2021] MIB version 2.52

Enhanced Features:

1. FRM220-CCF added relay change to Log

Modifications:

None

Fix:

1. FRM220-1000EAS/X, X-1, X-2F fixed walking the MIB and shown the Wrong Type/ Should be Count32
2. FRM220-10G-3R D/D Information corrects the display of DWDM SFP+ Wavelength (must be v1.102)

Known Issues:

1. There are known issues that some CWDM Mux/Demux may not show the correct channel wavelengths or upgrade port frequencies. Please refer to the original specifications of the card for the correct wavelengths. This issue is with the card's firmware and not the NMC.

NMC-R3 Release Notice

Date : February 8, 2021

This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.53

Version:

NMC-R3 v.5.53 [02/05/2021] MIB version 2.52

Enhanced Features:

1. FRM220 OPS51/52, OPS51M added Transition Delay Time (requires OPS v2.004 or above)

Modifications:

1. Add support for CH02-SMT chassis
2. MIB updated from 2.51 to 2.52
3. CWMD81A-2759 and CWMD81B-2961 modify RX wave length

Fix:

1. 1000EAS/X, X -1 fixed SNMP MIB display of D/D Vendor Serial Number

Known Issues:

1. There are known issues that some CWDM Mux/Demux may not show the correct channel wavelengths or upgrade port frequencies. Please refer to the original specifications of the card for the correct wavelengths. This issue is with the card's firmware and not the NMC.

NMC-R3 Release Notice

Date : January 18, 2021

This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.52

Version:

NMC-R3 v.5.52 [01/14/2021] MIB version 2.51

Enhanced Features:

None

Modifications:

1. Add Line Cards FRM220-100G, OAB21, OAB21A, OAP10, OAP17
2. MIB updated from 2.50 to 2.51

Fix:

None

Known Issues:

1. There are known issues that some CWDM Mux/Demux may not show the correct channel wavelengths or upgrade port frequencies. Please refer to the original specifications of the card for the correct wavelengths. This issue is with the card's firmware and not the NMC.

NMC-R3 Release Notice

Date : November 10, 2020
This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.51

Version:
NMC-R3 v.5.51 [11/06/2020] MIB version 2.50

Enhanced Features:
None

Modifications:
1. Add Line Card FRM220-CWDM81A-2759 and FRM220-CWDM81B-2961
2. MIB updated from 2.49 to 2.50

Fix:
None

Known Issues:
1. There are known issues that some CWDM Mux/Demux may not show the correct channel wavelengths or upgrade port frequencies. Please refer to the original specifications of the card for the correct wavelengths. This issue is with the card's firmware and not the NMC.

NMC-R3 Release Notice

Date : October 20, 2020

This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.50

Version:

NMC-R3 v.5.50 [10/20/2020] MIB version 2.49

Enhanced Features:

1. Added fan alarm option to support the new high-speed (7000RPM) cooling fans for CH20 chassis.

Modifications:

1. MIB updated from 2.48 to 2.49

Fix:

None

Known Issues:

1. There are known issues that some CWDM Mux/Demux may not show the correct channel wavelengths or upgrade port frequencies. Please refer to the original specifications of the card for the correct wavelengths. This issue is with the card's firmware and not the NMC.

NMC-R3 Release Notice

Date : July 21, 2020

This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.49

Version:

NMC-R3 v.5.49 [06/23/2020] MIB version 2.48

Enhanced Features:

1. Added support to read SFP+ Vendor Serial Number for "FRM220-40G1Q4S", "FRM220-16G3R", "FRM220-10G3R", "FRM220-4G3R", "FRM220-2R-4G3S", "FRM220-1000EAS/X", "FRM220-1000EAS/X-1"
2. Added support to read QSFP Vendor Serial Number for "FRM220-40G1Q4S"
3. Added a hidden webpage for user to enter the card serial number (enter method: NMC IP Address/cardsn.asp). <mark>IMPORTANT: Any alphabetic characters should be entered in Uppercase to avoid issues with Smartview.</mark>

Modifications:

1. MIB updated from 2.46 to 2.48

Fix:

None

Known Issues:

1. There are known issues that some CWDM Mux/Demux may not show the correct channel wavelengths or upgrade port frequencies. Please refer to the original specifications of the card for the correct wavelengths. This issue is with the card's firmware and not the NMC.

NMC-R3 Release Notice

Date : March 5, 2020
This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.47

Version:
NMC-R3 v.5.47 [03/05/2020] MIB version 2.46

Enhanced Features:
1. Added support for FRM220-TM-10GMUX card.

Modifications:
None

Fix:
1. Improved the chassis polling in an effort to correct a random and intermittent issue where the NMC would become hung up (requiring the NMC to be power cycled) when configured into a chassis cascade application. Note: Master and All Slave NMC must be running the same NMC version.
2. Corrected an SNMP issue where NTP clocks were not properly set in cascaded NMC card. (Since those cards are not network connected, their "time" is set via SNMP from the Master NMC.)
3. Fixed a DDM display issue of DOM supported SFP in the FRM220-Eoe1/GS card.

Known Issues:
1. There are known issues that some CWDM Mux/Demux may not show the correct channel wavelengths or upgrade port frequencies. Please refer to the original specifications of the card for the correct wavelengths. This issue is with the card's firmware and not the NMC.

NMC-R3 Release Notice

Date : November 5, 2019

This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.46

Version:

NMC-R3 v.5.46 [10/31/2019] MIB version 2.46

Enhanced Features:

None

Modifications:

1. The Tunable SFP of FRM220-10G-3R has the option of Channel/Frequency.
2. The FRM220-10G-3R's Tunable SFP adds Frequency to adjust the WaveLength function.
3. The Tunable SFP of the FRM220-10G-3R modified the "Set to Default" function. In the case of the Tunable SFP, after setting the Default, there is a fixed WaveLength of 1561.42 nm and a Frequency of 192.00 THz.

Fix:

1. Corrected a card "ID" issue that confused OPS cards and MuxDemux CWDM cards causing management to mis-identify them.
2. Fix the log message of FRM220-10G-SXX when switching the Operation Mode.
3. Fix the FRM220-10G-SXX page. If the user has modified the settings and has not saved it, there must be a warning popup window.
4. Fixed the problem where the D/D Information and Status of FRM220-40G-1Q4S was read incorrectly in MIB Browser.

Known Issues:

1. There are known issues that some CWDM Mux/Demux may not show the correct channel wavelengths or upgrade port frequencies. Please refer to the original specifications of the card for the correct wavelengths. This issue is with the card's firmware and not the NMC.

NMC-R3 Release Notice

Date : July 19, 2019

This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.45

Version:

NMC-R3 v.5.45 [04/12/2019] MIB version 2.45

Enhanced Features:

None

Modifications:

1. For the FRM220-1000MS card, changed the factory default 'jumbo frames' from disabled to enabled.

Fix:

None

Known Issues:

None

NMC-R3 Release Notice

Date : Mar 25, 2019
This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.44

Version:
NMC-R3 v.5.44 [03/15/2019] MIB version 2.45

<u>Enhanced Features:</u>
None

<u>Modifications:</u>
1) Protection Card (OPS51, OPS52, OPS51M, OPS52P) Added new Traps:
Working Path change to Primary.
Working Path change to Secondary.
Working Path change to Primary by manually.
Working Path change to Secondary by manually.

<u>Fix:</u>
None

<u>Known Issues:</u>
None

NMC-R3 Release Notice

Date : Jan 22, 2019

This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.42

Version:

NMC-R3 v.5.42 [12/25/2018] MIB version 2.45

Enhanced Features:

None

Modifications:

1) MIB updated from 2.44 to 2.45
2) Added support for OPS52P and OPS51M
3) Added Japanese SDI data rate to FRM220-16G-3R/10G-3R/4G-3R

Fix:

None

Known Issues:

None

NMC-R3 Release Notice

Date : Jan 22, 2019

This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.41

Version:

NMC-R3 v.5.41 [10/2/2018] MIB version 2.44

<u>Enhanced Features:</u>

None

<u>Modifications:</u>

None

<u>Fix:</u>

1) Fixed a bug in SNMP v2c traps that would cause OS crash

<u>Known Issues:</u>

None

NMC-R3 Release Notice

Date : Jan 22, 2019

This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.40

Version:

NMC-R3 v.5.40 [8/23/2018] MIB version 2.44

<u>Enhanced Features:</u>

1. Add OM4 Link Length for FRM220-40G-1Q4S and 40G-2Q

<u>Modifications:</u>

1. Added support for FRM220-FXO/FXS with SFP

<u>Fix:</u>

None

<u>Known Issues:</u>

None

NMC-R3 Release Notice

Date : Jan 22, 2019

This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.39

Version:

NMC-R3 v.5.39 [8/10/2018] MIB version 2.44

<u>Enhanced Features:</u>

None

<u>Modifications:</u>

1. Added support for FRM220-40G-2Q
2. MIB from 2.43 to 2.44

<u>Fix:</u>

None

<u>Known Issues:</u>

None

NMC-R3 Release Notice

Date : Aug 1, 2018
This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.38

Version:
NMC-R3 v.5.38 [7/25/2018] MIB version 2.43

<u>Enhanced Features:</u>
None

<u>Modifications:</u>
1. Added support for FRM220-10G-3R

<u>Fix:</u>
None

<u>Known Issues:</u>
None

NMC-R3 Release Notice

Date : Jun 12, 2018
This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.37

Version:
NMC-R3 v.5.37 [6/1/2018] MIB version 2.42

<u>Enhanced Features:</u>
1. Added loop-back feature to FRM220A-1000EAS/X, 1000EAS/X-2F and FRM220-100AS

<u>Modifications:</u>
1. Modified the fiber speed settings from the original 1G or 100M choice to 0)1000 Auto, 1)1000FDX, or 2)100FDX

<u>Fix:</u>
None

<u>Known Issues:</u>
FRM220A-1000EAS/X and X-2F must be firmware versions 1.047 or above.
FRM220-100AS must be firmware version 1.019 or above.

NMC-R3 Release Notice

Date : May 29, 2018

This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.36

Version:

NMC-R3 v.5.36 [5/24/2018] MIB version 2.41

<u>Enhanced Features:</u>

None

<u>Modifications:</u>

1. Added support for FRM220-4G-3R

<u>Fix:</u>

None

<u>Known Issues:</u>

None

NMC-R3 Release Notice

Date : Sep 27, 2017
This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.35

Version:
NMC-R3 v.5.35 [8/10/2017] MIB version 2.40

Enhanced Features:
1. Added SNMP v2c trap feature

Modifications:
1. Added support for FRM220-OADM-61, FRM220-OADM-59, FRM220-OADM-57, FRM220-OADM-55, FRM220-OADM-53, FRM220-OADM-51, FRM220-OADM-49, FRM220-OADM-47, FRM220-OADM-W5961-E6159, FRM220-OADM-W5557-E5755, FRM220-OADM-W5153-E5351, FRM220-OADM-W4749-E4947, FRM220-OADM-W4345-E4543, FRM220-OADM-W3537-E3735, FRM220-OADM-W3133-E3331, FRM220-OADM-W2729-E2927, DWDM401-C21-C24, FRM220-CCF20, FRM220-CCF40, IFC-CCF20-HP, IFC-CCF40-HP

Fix:
1. Fixed iMux4T remote management issue
2. Fixed a bug where 10/100i(S) setting could not be applied to other chassis, in stacked configuration, if the NMC version was an earlier version
3. Fixed in console/Telnet, user not able to enter more than 17 characters for SNMP community string.
4. Fixed, for FRM220-1000EAS, the remote screen issue for "Device Information and Settings".
5. Fixed, in console/Telnet, user could disable fiber in remote in-band unit for FRM220-1000EAS, FRM220-1000EAS-1F and FRM22-10/100i(S), which of course would then loose remote management.
6. Fixed sub-menu issues in console/Telent for FRM220-1000E(S)-1.
7. Fixed in console/Telnet, ESC key needed to press twice to exit UTP speed and Duplex sub-menus.

Known Issues:
None

NMC-R3 Release Notice

Date : August 3, 2017
This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.34

Version:
NMC-R3 v.5.34 [7/20/2017] MIB version 2.40

Enhanced Features:
None

Modifications:
1. Added support for CCF cards CCF20 and CCF40
2. MIB version from 2.39 -> 2.40

Fix:
None

Known Issues:
None

NMC-R3 Release Notice

Date : May 24, 2017

This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.33

Version:

NMC-R3 v.5.33 [5/24/2017] MIB version 2.39

Enhanced Features:

1. Added feature to send traps as SNMP V1 or V2C.

Modifications:

None

Fix:

None

Known Issues:

None

NMC-R3 Release Notice

Date : May 4, 2017

This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.32

Version:

NMC-R3 v.5.32 [5/2/2017] MIB version 2.39

Enhanced Features:

1. Add a new Line Card, DWDM401-C21-C24

Modifications:

1. MIB from v2.38 to v2.39

Fix:

None

Known Issues:

None

NMC-R3 Release Notice

Date : Apr 20, 2017
This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.31

Version:
NMC-R3 v.5.31 [4/12/2017] MIB version 2.38

Enhanced Features:
None

Modifications:
None

Fix:
1. Fixed remote management issue with iMux4.

Known Issues:
None

NMC-R3 Release Notice

Date : Mar 31, 2017
This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.30

Version:
NMC-R3 v.5.30 [3/29/2017] MIB version 2.38

<u>Enhanced Features:</u>
1. NMC-R3 added support for FRM220-OADM CWDM ADM card.

<u>Modifications:</u>
1. MIB version 2.37 -> 2.38

<u>Fix:</u>
None

<u>Known Issues:</u>
OADM card must upgrade from 2.007 to 2.008

NMC-R3 Release Notice

Date : Feb 23, 2017
This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.29

Version:
NMC-R3 v.5.29 [2/13/2017] MIB version 2.37

Enhanced Features:
1. NMC-R3 added support for FRM220-40G1Q4S transponder card.
2. NMC-R3 added support for FRM220-OAB15 EDFA card.
3. NMC-R3 added support for FRM220-10GC-TS 10G Ethernet Media Converter card.

Modifications:
1. MIB version 2.36 -> 2.37

Fix:
None

Known Issues:
None

NMC-R3 Release Notice

Date : Jan 3, 2017
This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.27

Version:
NMC-R3 v.5.27 [12/22/2016] MIB version 2.36

<u>Enhanced Features:</u>
1. NMC-R3 added support for RMON counters in 1000EAS/X card (v1.044).

<u>Modifications:</u>
1. MIB version 2.34 -> 2.36

<u>Fix:</u>
None

<u>Known Issues:</u>
None

NMC-R3 Release Notice

Date : Oct 28, 2016
This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.25

Version:
NMC-R3 v.5.25 [10/16/2016] MIB version 2.34

<u>Enhanced Features:</u>
1. NMC-R3 added support for cards:
    FRM220-EoE1/GS (EoE1/G with SFP optical Ethernet port)
2. MIB version 2.32 -> 2.34

<u>Modifications:</u>
None

<u>Fix:</u>
1. Fix an issue under Telnet menu, SNMP trap IP could not be deleted.

<u>Known Issues:</u>
None

NMC-R3 Release Notice

Date : Sep 29, 2016
This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.24

Version:
NMC-R3 v.5.24 [08/12/2016] MIB version 2.32

<u>Enhanced Features:</u>
1. NMC-R3 added support for cards:
    FRM220-OPS51
    FRM220-OPS52 (previously known as FRM220-Protection)
    FRM220-CWDXH0-Z (16ch CWDM DeMux w/o monitor port)
    FRM220-CWMXH0-Z (16ch CWDM Mux w/o monitor port)
    FRM220-CWDXH1-Z (16ch CWDM DeMux w/ monitor port)
    FRM220-CWMXH1-Z (16ch CWDM Mux w/ monitor port)
2. MIB version 2.31 -> 2.32

<u>Modifications:</u>
None

<u>Fix:</u>
None

<u>Known Issues:</u>
None

NMC-R3 Release Notice

Date : Jun 23, 2016
This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.23

Version:
NMC-R3 v.5.23 [05/06/2016] MIB version 2.31

<u>Enhanced Features:</u>
1. NMC-R3 added support for the new CWDM cards:
    FRM220-ACSC16MS
    FRM220-ACSC16DA
    FRM220-ACSC8MOES
    FRM220-ACSC8MS

<u>Modifications:</u>
None

<u>Fix:</u>
None

<u>Known Issues:</u>
None

NMC-R3 Release Notice

Date : Jun 23, 2016
This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.22

Version:
NMC-R3 v.5.22 [04/29/2016] MIB version 2.30

Enhanced Features:
1. NMC-R3 added support for the new CWDM cards:
    FRM220-CWMXH0-Z
    FRM220-CWDXH1-Z
    FRM220-CWMXH1-Z

Modifications:
None

Fix:
None

Known Issues:
None

NMC-R3 Release Notice

Date : Feb 22, 2016
This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.21

Version:
NMC-R3 v.5.21 [02/17/2016] MIB version 2.29

<u>Enhanced Features:</u>
1. NMC-R3 added support for the new MEP function in MSW 202 / MX210 V1.052 or later.
2. Add initial support for new MSW404 in NMC-R3

<u>Modifications:</u>
1. NMC management of FRM220-E1 / T1, modified the Signal alarm message, from "E1 Signal" to "E1 / T1 Signal".

<u>Fix:</u>
1. Fixed the issue in Microsoft IE browser where setting of Alias information could only set three characters.

<u>Known Issues:</u>
None

NMC-R3 Release Notice

Date : Dec 15, 2015
This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.20

Version:
NMC-R3 v.5.20 [12/14/2015] MIB version 2.28

Enhanced Features:
None

Modifications:
None

Fix:
1. For FRM220-16G-3R, in web, when the SFP+ is inserted and web page is repeatedly 'refreshed', a get "connection refused' message will be displayed in the browser.

Known Issues:
None

NMC-R3 Release Notice

Date : Oct 20, 2015

This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.19

Version:

NMC-R3 v.5.19 [10/20/2015] MIB version 2.27

Enhanced Features:

None

Modifications:

None

Fix:

1. A bug in SNMP walk for Remote A/B of 1000EAS/X was fixed.

Known Issues:

None

NMC-R3 Release Notice

Date : Aug 21, 2015

This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.18

Version:

NMC-R3 v.5.18 [08/17/2015] MIB version 2.27

<u>Enhanced Features:</u>

None

<u>Modifications:</u>

None

<u>Fix:</u>

1. Fix the NMC rack cascade problem where slave chassis cannot set FRM220-10 / 100i-2E

<u>Known Issues:</u>

None

NMC-R3 Release Notice

Date : July 16, 2015
This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.17

Version:
NMC-R3 v.5.17 [07/14/2015] MIB version 2.27

Enhanced Features:
1   Add HTML tab input feature. Customer can set "title" name at Target Name field.

Modifications:
1   10G-SS, Local Area, modify Fx1/Fx2 to Line/Client.
2   1000DS, Local Area, modify Fx1/Fx2 to SFP-1/SFP-2.
3   16G-3R, Local Area, modify Fx1/Fx2/Fx3/Fx4 to CH1-1/CH1-2/CH2-3/CH2-4.
4   16G-3R, FX Information, modify SFP1/ SFP2/ SFP3/ SFP4 to CH1-1/CH1-2/CH2-3/CH2-4.
5   16G-3R, modify Fiber Link Up/Down trap format.
(The above changes match the management with the actual printed designations on the cards.)

Fix:
None

Known Issues:
None

NMC-R3 Release Notice

Date : June 01, 2015

This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.14

Version:

NMC-R3 v.5.14 [06/01/2015] MIB version 2.27

Enhanced Features:

None

Modifications:

None

Fix:

1. Fixed an oversight, when NMC is placed in CH02-NMC two slot chassis, alarm is reported for power and fans. CH02-NMC does not support fan or power monitoring. So, this alarm is disabled when placed in 2-slot chassis.

Known Issues:

None

NMC-R3 Release Notice

Date : May 29, 2015
This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.13

Version:
NMC-R3 v.5.13 [05/27/2015] MIB version 2.27

Enhanced Features:
None

Modifications:
None

Fix:
1. With SNMP operation, the 10G-SXX, fixed Rx Sensitivity display problems.

Known Issues:
None

NMC-R3 Release Notice

Date : May 22, 2015
This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.12

Version:
NMC-R3 v.5.12 [04/23/2015] MIB version 2.27

Enhanced Features:
1. Add support for new FRM220-16G-3R

Modifications:
1. Support MIB version 2.27

Fix:
None

Known Issues:
None

NMC-R3 Release Notice

Date : Mar 31, 2015
This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.11

Version:
NMC-R3 v.5.11 [03/04/2015] MIB version 2.26

<u>Enhanced Features:</u>
1. Add support for new CH04A 4-slot chassis, including fan/power monitoring
2. Added FEF (far end fault) function to FOM01/FOM04 (versions 1.40/1.06 respectively)

<u>Modifications:</u>
1. Support MIB version 2.26

<u>Fix:</u>
None

<u>Known Issues:</u>
None

NMC-R3 Release Notice

Date : Dec 29, 2014
This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.07

Version:
NMC-R3 v.5.07 [12/27/2014] MIB version 2.22

Enhanced Features:
None

Modifications:
None

Fix:
1. Fixed, in SNMP, the Manager IP cannot be setup as "default" or "*" bug.

Known Issues:
None

NMC-R3 Release Notice

Date : Dec 24, 2014
This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.06

Version:
NMC-R3 v.5.06 [12/24/2014] MIB version 2.22

<u>Enhanced Features:</u>
1. Added: For 1000EAS/X-1 & 100AS-1 F/W ver.1.010, and 1000EAS/X-2F F/W ver.1.035, remote TLPT function.
2. Added: For 1000EAS/X-2F, in SNMP, in RemoteA/B tree, Accept Remote H/W Reset OID.

<u>Modifications:</u>
1. For Eoe1/G, modified the default value of Net Manager to "Enabled".

<u>Fix:</u>
1. For 100AS-1, 1000EAS/X-1, and 1000EAS/X-2F, fixed the VLAN setup bug when NMC was plugged-in after those NIC card on chassis.
2. For 100AS-1, fixed the Ingress/Egress Rate Limit setup can be up to 990MB bug. (it must be up to 99M or 100M without limitation.)
3. For 1000EAS/X-2F, in SNMP, in RemoteA/B tree, fixed remote power status bug.
4. For iMux4/5/8/16, fixed product info bug.

<u>Known Issues:</u>
None

NMC-R3 Release Notice

Date : Dec 1, 2014
This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.05

Version:
NMC-R3 v.5.05 [12/01/2014] MIB version 2.21

<u>Enhanced Features:</u>
1. Added a remote polling enable/disable feature (for chassis to chassis topology) to resolve the 'who is master?' conflict.
2. Added an "Alarm Active" feature to the log information web page.

<u>Modifications:</u>
None

<u>Fix:</u>
None

<u>Known Issues:</u>
None

NMC-R3 Release Notice

Date : Nov 17, 2014
This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.04

Version:
NMC-R3 v.5.04 [11/10/2014] MIB version 2.20

Enhanced Features:
1. Added SNMP trap for remote power failure (dying gasp) for Eoe1/G.
2. Added option to "keep IP" to the factory default reset function.
3. Added support for IMC100M / IMC1000M (S) -PH12.
4. Added support for FRM220-1000EAS/X-2F (1.033).
5. Added the inventory serial number feature to EoE1/G (ver. 1.026) and iMUX 4/5/8/16 (versions 1.231 / 1.407)
6. Added 1000EAS / X, 1000EAS / X-1 and 100AS-1, new ICMP Ping function (Card version number 1.033 / 1.007)
7. Added 1000EAS / X, new Fiber1 / 2 FEF status (Card version No. 1.033).
8. Added link state up/down alarm/trap for fiber ports on FRM220-1000DS (ver. 1.003).
9. Added Remote Power status, FEF and Fiber1 / 2 link event for GFOM04 / 08 (V1.004).

Modifications:
1. Modified Web display and MIB when using the "Serial NO" wording to "Serial Number"
2. Modified the default SNTP server IP address to 211.22.103.158.
3. Modified the loop back settings of 2.7G-3S so the function is similar to what they were in the 2.7G-2S.
4. Modified display of FRM220-1002ES, SFP DDM so that temperature is displayed under the Rx Power Margin reading.
5. Modified for special PCCW version, 1000EAS / X Full indicator (Card version No. 1.033) (When the NMC web Overview page displays 1000EAS / X, it will be different from standard CTC Union version)

Fix:
1. Fixed error reading DOM of XFP/SFP+ for FRM220-10G-SXX with firmware version 2.020.
2. Fixed issue in web interface for 10G-SXX set parameters, port reset and set default.
3. Fixed an issue with 2.7G-3S/2S where FX loss alarm has been disabled, but NMC still reports the alarm.
4. Corrected a spelling 'typo' in MX210/MSW202 (Hybird -> Hybrid).
5. Fixed the set loop back issue in FRM220-FTEC (when issued had no effect).
6. Corrected a spelling 'typo' in MX210/MSW202 (Hybird -> Hybrid).

Known Issues:
None

NMC-R3 Release Notice

Date : Sep 22, 2014
This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.03

Version:
NMC-R3 v.5.03 [09/19/2014] MIB version 2.19

<u>Enhanced Features:</u>
1. Added NMC support (in R3 only) for GFOM04 and GFOM08

<u>Modifications:</u>
None

<u>Fix:</u>
None

<u>Known Issues:</u>
None

NMC-R3 Release Notice

Date : Aug 19, 2014
This document describes the features added, modifications or fixes for FRM220-NMC(R3) version 5.01

Version:
NMC-R3 v.5.01 [08/13/2014] MIB version 2.17

<u>Enhanced Features:</u>
1. Adds MX210 setting support by NMC for QoS and LACP (NMC-R3 only)
2. Adds test LED feature to MX210 via NMC.
3. Adds ALS and LLF setting for MSW202/MX210.

<u>Modifications:</u>
None

<u>Fix:</u>
None

<u>Known Issues:</u>
None