

GE VERNOVA

Firmware Release Notes

Multilin 8 Series Protection and Control Relay Platform

8 Series Firmware Version 3.11

Release Notes

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Summary

GE Vernova has released Firmware Version 3.11 for the Multilin 8 Series Protection Relays. The release notes also include all prior updates on the Firmware Version 3.11 platform.

Multilin 8 Series Firmware Version

FW Version 3.11 – Released in May 2026
FW Version 3.10 – Released in Apr 2026
FW Version 3.02 – Released in Sept 2024
FW Version 3.01 – Released in Feb 2024
FW Version 3.00 – Released in May 2023

Release Date: May 28, 2026

- Multilin 8 Series firmware versions 1.2x and below cannot be upgraded to firmware version 1.3x and above. Please contact us to upgrade the product.
- Multilin 8 Series firmware versions 3.x and below cannot be upgraded to firmware version 4.x. Please contact us to upgrade the product.
- Upgrade the firmware to version 3.11 by downloading the file directly from GE Vernova website: 850 Feeder Protection System
- The latest D&I EnerVista Setup software v12.1 is available at the same location. The software supports Windows 7, 8.1, 10 and 11.

Note: Please contact your local Multilin sales representative or Multilin Customer Service Department for any questions regarding this upgrade.

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1 Firmware v3.11

1.1 Screen Saver and Display Intensity

Section:	HMI
Impact to customer:	Setting changes and improvements to logic managing the screen saver and display screen intensity. New setting 'Inactivity Timeout' added.
Products Affected:	8 Series
Versions Affected:	1.xx, 2.xx, 3.xx
What changed?	Improvements to Screen Saver and Display Intensity.

2 Firmware v3.10

2.1 Thermal Overload – 889 Generator Protection

Section:	Protection
Impact to customer:	Thermal Overload Element would not function when CT input K2 was configured.
Products Affected:	889
Versions Affected:	2.6x
What changed?	Thermal Overload algorithm has been updated to process signal input K2 when configured.

2.2 Synchronous Motor Start Sequence

Section:	Protection
Impact to customer:	After the synchronous motor start, the system may incorrectly remain in a “Motor Running” state, blocking Power Factor and SM Field Undercurrent protection (37F).
Products Affected:	869
Versions Affected:	2.7x, 2.8x, 2.9x, 3.0x
What changed?	Start Sequence Detection logic corrected for Synchronous Motor Application.

2.3 UnderFrequency / Rate of Change of Frequency (ROCOF)

Section:	Protection
Impact to customer:	UF / ROCOF not working properly with only voltage injection (current supervision not working as per product specification).
Products Affected:	845, 850, 859, 869, 889
Versions Affected:	2.7x, 2.8x, 2.9x, 3.0x
What changed?	UF/ROCOF logic corrected to match specification.

2.4 Rate of Change of Frequency (ROCOF)

Section:	Protection
Impact to customer:	The Rate of Change of Frequency element may fail to operate during a frequency ramp condition.
Products Affected:	889
Versions Affected:	2.7x, 2.8x, 2.9x, 3.0x
What changed?	Corrected Hysteresis calculation.

2.5 Transformer Energization Records

Section:	Records
Impact to customer:	Energization records may display incorrect timestamps when opened for viewing.
Products Affected:	845
Versions Affected:	2.8x, 2.9x, 3.0x
What changed?	Updated the record handling logic to ensure correct time stamping.

2.6 Breaker Status Setpoint Setting introduced for 3rd breaker

Section:	HMI
Impact to customer:	3rd breaker status setpoint missed on 3 breaker application.
Products Affected:	845
Versions Affected:	2.8x, 2.9x, 3.0x
What changed?	Introduced the 3rd breaker status setpoint under Setpoints > Installation.

2.7 Electrical Signature Analysis (ESA) - Base line data

Section:	Monitoring
Impact to customer:	Initiating the “Clear ESA Log” command or toggling baseline mode resulted in clearing of the ESA baseline data.
Products Affected:	869
Versions Affected:	3.1x
What changed?	The logic was corrected so baseline data can only be cleared using the ‘Clear ESA baseline data’ command.

2.8 Electrical Signature Analysis (ESA) – Event Data

Section:	Records
Impact to customer:	Actual Events previously displayed only a single generic label “Load Bin”, even though the format code FC273 supports three distinct load bins: BrngFlt Load Bin, MechFlt Load Bin, and StatrFlt Load Bin.
Products Affected:	869
Versions Affected:	3.1x
What changed?	Load Bin labels corrected in Actual Events.

2.9 Compatibility Mode

Section:	HMI
Impact to customer:	Firmware versions below 4.xx incorrectly displayed selectable compatibility options for 845 and 889, even though these options are not supported.
Products Affected:	845, 889
Versions Affected:	1.xx, 2.xx, 3.xx
What changed?	Removed unsupported 845 and 889 compatibility options.

2.10 Update graphics to show GE VERNOVA

Section:	HMI
Impact to customer:	Initial boot screen and first splash screen updated to show 'GE Vernova'.
Products Affected:	8 Series
Versions Affected:	1.xx, 2.xx, 3.xx
What changed?	Graphics logo during boot sequence

3 Firmware v3.03

3.1 Security patch applied on VxWorks

Wind River VxWorks source code updated to address CVE-2019-12263.

3.2 Thermal Model incorrectly calculating Thermal Capacity

Corrected a mistake in firmware which affected products using FlexCurve OL and Voltage Dependent (VD) functionality. Firmware incorrectly used TDM (Time Dial Multiplier) setting intended for Standard Motor curve instead of TDM for FlexCurve OL when the VD functionality was enabled.

3.3 Thermal Inhibit

Corrected Thermal inhibit logic to allow motor start when the Thermal Lockout time is zero.

3.4 Reduced Voltage Starting

Reduced Voltage Starting hysteresis was modified to dropout at correct magnitude of voltage

4 Firmware v3.02

4.1 Output Relay Operation state can be changed in Observer mode

Removed the ability to change output relay Operation state (Failsafe, Non-Failsafe), when contact output Type is set to Latched, in Observer mode

4.2 Transformer energization records

Corrected transformer energization records availability after power cycle to protection relay

4.3 750-850 Compatibility mode – System Frequency format corrected

Corrected the format code on 750 to 850 compatibility mode register for system frequency address 0x0314 Hex

4.4 Unexpected Reboot on products with Electrical Signature Analysis (ESA) option

Record ID index register size was increased to 32 bits to remove the risk of unexpected reboot that may occur during a motor start.

5 Firmware v3.01

5.1 IEC61850 - MMS Dataset updated to use UTC time

Updated IEC61850 MMS Dataset to use UTC time stamp for MMS instead of local time.

5.2 IEC61850 - Enhanced buffered reports

Enhanced relay's ability to handle very high event generation incidents, which were impacting relay's ability to publish IEC61850 buffered reports.

5.3 IEC61850 - Enhanced Report availability after disconnection

Report enhancement to improve time it takes for the reports to be available after disconnection.

5.4 Enhanced relays' ability to handle events storm

Enhanced relays' ability to handle events storm of more than 200 events in less than 6 msecs.

5.5 Modbus User map

Reading from unconfigured user map address will now return a zero value.

5.6 Slot I/O Error self-test diagnostic message logic

Slot I/O error mechanism was changed to allow for self-recovery from transient events that disrupt communications between RTD and CPU modules. This enhancement works in conjunction with latest firmware revision v1.09 of the RTD module.

5.7 Annunciator Panel

Annunciator logic corrected to activate when there is any trip or alarm.

5.8 Single Line Diagram (SLD) objects

Relay will now ignore any SLD objects placed within Status Bar area of the screen.

6 Firmware v3.00

6.1 Front panel keypad non-responsive

Resolved Front Panel keypad from becoming unresponsive when target message(s) are initiated, while the relay was in screen saver mode.

6.2 Undervoltage reactive power

Corrected UV reactive power algorithm to pick up correctly on forward and reverse direction and updated technical specification for this element.

6.3 Negative Power Values on User map read wrong values

Negative Power Values on User map read wrong values when in compatibility mode.

6.4 Date and Time registers are swapped when on compatibility mode

Corrected Date and Time registers on compatibility mode.

6.5 Speed setting for Tachometer

Expanded the Tachometer element's pickup setting range for Alarm and Trip from 50%-120% to 20%-120%.

6.6 Broken Rotor Bar

Corrected Broken Rotor Bar algorithm to correctly measure when the VT configuration is set to Delta.

6.7 Synchronous Motor Power Factor Regulation for ACB connected systems

Synchronous Motor Power Factor regulation corrected to support ACB rotation.

6.8 Synchronous Motor FAR output

Corrected FAR (Field Application Relay) performance, during marginal operating conditions, to ensure it remains in latched status when field is applied.

6.9 Synchronous Motor Start Sequence Target messages

Updated Synchronous Motor Start Sequence target messages (FLD Sync Cmd, Rel Torque Sync Cmd) to reset after 10 seconds, instead of staying latched.

6.10 Synchronous Field VAC Measurement

Corrected Synchronous algorithm to filter SM Field VAC signal during Synchronous motor starting.

6.11 Addition of Exciter VDC Filter

Introduced filter for Synchronous Motor DC Field Voltage signal to improve measurement accuracy.

6.12 Speed Dependent Thermal Protection

The Thermal Capacity calculation has been updated to make it less sensitive to AC voltage distortion.

6.13 Power Factor

Resolved PF Protection to be active should status change from SM Running or Motor Overload to Motor Running.

6.14 Synchronous Motor Field Undercurrent Protection

Resolved Undercurrent protection to be active when motor status changes from SM Running or Motor Overload to Motor Running.

For product support, contact the information and call center as follows:

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