Changelog GEN24 208-240

Fronius International

November 19, 2024

Version: 1.33.7-1

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1.1 Fronius Primo GEN24 3.0 - 6.0 208-240 / Primo GEN24 8.0 - 10.0 208-240

1.1.1 Bundle 1.33.7-1

Component	Version
Core	1.27.1-7
Control	1.0.1-1
WebUI	1.27.1-1
Kronos	03.01.05-build-26230
Zeus	03.00.05-build-19063
Rhea	02.15.01

New features

/ Grid Feed-In Regulation, introduced phase-specific limitations for a more balanced energy distribution.
/ Improved system-wide power management for setups with multiple inverters.
/ Future devices will feature unique access point passwords, enhancing network security.
/ Adjustable Backup Mode Frequency, now offers frequency adjustment options in backup mode for better system adaptability.
/ Achieved quicker transition times to Essential Load backup-mode, ensuring minimal disruption and improved reliability.
/ Improved visualization of WLAN signal strength.
/ Enhanced organization and tracking with added numbering of load management rules.
/ Upgraded IEEE 1547 compliant SunSpec Modbus 7xx models for improved performance.
/ Added Ramp-up Mode to facilitate smoother reconnection after Grid overvoltage events.
/ System Deadlock prevention in back-up mode - System preservation during night

  / Depending on the battery and inverter type, a reserve capacity is now always retained when the function is activated. The inverter will be supplied for at least 16 hours in emergency power mode. Further information can be found in the operating instructions.

/ All SoC settings in battery management menu accessible with customer login. Now its possible to get access to all SoC settings with customer login in the battery management menu
/ Detection and indication of a wrong battery size during commissioning process of the inverter. Event 1148 occurs if the size of the connected battery does not match the hardware limits of the corresponding inverter. This is a warning event and does not affect the inverter function.
/ Adapt Enable/Disable Behavior for Modbus 700 Models
/ Certified by Sunspec Modbus for US GEN24 Inverter

Bugfixes

/ Enhanced update capability, Updates can now be performed seamlessly across all devices.
/ Improved clarity in behavior following over-frequency steps during power limitation.
/ Enhanced internal frequency dependent power control threshold settings for better stability and control.
/ The Safety Operator now seamlessly updates Reconnect Limits.
/ Subscribtion Handling Improvements after Paramter changes.
/ Power surplus activation now more reliably triggered above the designated limit.
/ Improved parameter changes via WebUI.
/ Improved Inverter Standby behavior according to Modbus configuration.

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/ IEEE1547 register values have been reworked at startup for enhanced accuracy.
/ Added additional parameter for better power factor management.
/ Power surplus deactivation now accurately occurs when falling below the designated limit.
/ Power reduction settings now persist even if the smart meter connection is interrupted.
/ Inverter feed-in during software update download is now safeguarded.
/ Reworked Enter-Service behavior to ensure maximum accuracy even with a configured Reconnect time of 0s.
/ Now quicker disconnection when combining Softlimit, Hardlimit, and Failsafe measures.
/ State 1125 Adjustment, corrected the triggering mechanism to ensure reliability in backup power scenarios.
/ Technician reset now reverts settings to default for easier troubleshooting.
/ Enhanced PV power data accuracy.
/ DNO Rule precision, reduced decimal digit count for clearer rule compliance.
/ Solar.web Smart Meter Logging Correction, now displays correct power values, avoiding negatives.
/ Modbus TCP Meter Configuration, addressing improvements ensure distinct device identification.
/ Corrected AC overvoltage handling to ensure reliable PV point activation.
/ Dynamic peak manager mode MLSD leads into continuous loop during power check
/ Ensures Modbus Interface 0 is set to master when integrating a smart meter.
/ Enhanced responsiveness to dynamic power reduction settings.

Setup changes

/ Corrected settings for Q Relative - Constant Reactive Power in configurations and adjusted settings, limits, and mappings for Power-dependent Reactive Power Characteristics.
/ Adjusted Grid Frequency Dependent Power Control Time Constants and Intentional Delay Time.
/ Improved Reactive Power mode operation and adapted multiple Reactive Power mode time constants.
/ Adapted Softstart gradient.
/ Applied voltage-dependent power control adaptations.
/ Updated minimum values for the reconnect limit.
/ Adjusted the "CFC of AFCI" parameter.
/ Updated the Power Reference Mode for Overvoltage conditions.

1.1.2   Bundle 1.30.4-1

Component	Version
CoyoteControl	1.0.1-1
CoyoteCore	1.24.1-7
Zeus	2.28.5-16240
Rhea	2.15.1-1
Kronos	2.36.6-23207

New features

/ Added compatibility with new hardware models to extend the products usability and flexibility.
/ Removed automatic signal recording for Arc Fault Circuit Interruption to enhance system performance.
/ Enabled automatic data upload following residual current events for improved incident tracking.
/ Introduced device-dependent configuration options allowing for tailored system setups.
/ Refactored energy management system for optimized performance and efficiency.
/ Implemented system power control features to manage energy distribution effectively.
/ Integrated IEEE 1547 Modbus local persistence for reliable data storage.
/ Established IEEE 1547 SunSpec Modbus communication for standardized data exchange.
/ Configured module level shutdown via the user interface of the inverter for enhanced safety and control.
/ Synchronized update status across systems to maintain consistency.
/ Implemented Arc Fault Circuit Interrupter operation for Fronius Primo GEN24 3.0-6.0 208-240 models.
/ Extended Arc Fault Circuit Interrupter operation to Fronius Primo GEN24 8.0-10.0 208-240 models.

Bugfixes

/ Restored the functionality for logging low-temperature states.
/ Communication LED did not always show correct state when WPS was activated.
/ Renewed the WPA supplicant to ensure secure wireless connections.
/ Improved the wording on the user interface of the inverter for clearer communication.
/ Adapted trip times for certain asymmetric over- and undervoltage events to protect against system instability.
/ Enhanced the startup procedure to reduce initialization time and improve reliability.
/ Modified error codes for module and ambient temperature events for accurate troubleshooting.
/ Improved the operation of the 24-hour isolation measurement for better safety compliance.
/ Modernized the main menu on the user interface of the inverter for an improved user interface.
/ Changed the DHCP operation to ensure stable connectivity after WLAN reconnection.
/ Reevaluated and updated the values of reactive power displayed on the user interface of the inverter.
/ Advanced the automatic WLAN reconnection mechanism for seamless network connectivity.
/ Modernized overall operation in the network for enhanced performance and compatibility.
/ Improved communication with Fronius Solar.web for efficient data exchange and monitoring.
/ Renewed the data logging mechanism to ensure comprehensive system monitoring.
/ Altered the linking between the user interface of the inverter and Fronius Solar.web for streamlined user experience.
/ Advanced error logging for detailed system diagnostics and troubleshooting.
/ Enhanced operation via WLAN for reliable wireless control and configuration.
/ Modernized the update process for efficient and secure software upgrades.
/ Adapted parameters for IEEE1547.1 compliance to meet industry standards.
/ Corrected incorrect state code trippings for improved system accuracy.

/ Improved Arc Fault Detection to enhance safety and prevent potential hazards.
/ Renewed the rollback behavior to ensure system stability in case of update failure.
/ Advanced grid code selection for optimal system performance across various grid standards.
/ Adapted the update process for outdated software to ensure system security and compatibility.
/ Improved the functionality of export limitation for effective energy distribution.
/ Changed the functionality of load management for optimized power usage.
/ Improved the overall rollback function for enhanced system recovery capabilities.
/ Renewed network reconnection after updates to ensure continuous operation.
/ Revitalized the user interface of the inverter for an enhanced user experience.
/ Renewed Powerline communication configuration on the user interface of the inverter for improved data transmission.
/ Restored rollback functionality to working order to safeguard against update failures.
/ Renewed grid type visibility within the setup configuration for better system customization.
/ Changed PV Point operation for optimized solar energy management.
/ Improved export limitation control for secondary devices operating in the system.
/ Adapted the functionality of active power prioritization according to voltage and frequency.
/ Improved update migration to ensure seamless software transitions.
/ Modernized residual current measurement for enhanced safety monitoring.
/ Adapted the PV configuration on the user interface of the inverter for improved PV module management.
/ Renewed power limit settings for more precise control over energy consumption.
/ Changed the user interface of the inverter update visualization for better update tracking.
/ Added a grid configuration button for easy access to grid settings.
/ Adapted the password check on the user interface of the inverter for enhanced security.
/ Corrected the alignment of the confirmation button in the user menu for improved usability.
/ Improved ramp rate communication after I/O power limitation for better system responsiveness.
/ Enhanced the detection of significant frequency jumps/deviations for system stability.
/ Updated terms and conditions to reflect the current operational and legal framework.
/ Made firmware changes to the Arc Fault Circuit Interrupter for improved functionality.

Setup changes

/ Improved "grid frequency-dependent power reduction intentional delay time" for enhanced power management.
/ Changed RPM AC voltage filter time constant for optimized signal processing.
/ Adapted power reference mode for overvoltage to protect against voltage spikes.
/ Set Arc Fault Circuit Interrupter parameter to unlimited reconnects in all available setups for enhanced reliability.
/ Adapted parameter for underfrequency when starting the inverter to ensure smooth operation.
/ Adapted active power operation depending on the frequency P(f) for optimized performance.

   / United States (US17, US18, US19, US20)

/ Adapted parameter trip times in all available setups for improved safety and compliance.
/ Renewed parameter for minimum voltage limit for enhanced system protection.

   / Canada (CAN1- 2)
   / United States (US15-27)

/ Extended grid monitoring time for improved system overview and stability.
/ Added setups.

   / US FTS 60HZ, US-FTS
   / MX220; MX220N, MX240, MX240N

/   HI1-240, HI2-208N, HI4-208, HI5-240
/   CAL1-240N, CAL2-208N, CAL4-208; CAL5-240
/   CAN1-8, CAN 240N
/   US220, US220N
/   US1-28

/   Adapted available IEEE1547:2018 setups.