

UR Firmware Release Notes

Version 3.33

The features in this release are:

- Real Time Clock: Some units would reset the clock to the default value (January 1, 1970) after loss of control power. This rare issue has been corrected.
- 4L Output Card (Latching Outputs): Operate and Reset signals were altered to be level triggered as opposed to rising edge triggered. This change was initiated to account for cases where Operate and Reset signals are applied simultaneously.
- User Programmable Pushbuttons have associated "flash messages" that are displayed when the buttons are pressed. Messages programmed as blank (all spaces) are now no longer displayed when the associated button is pressed.
- An additional mode of file transfer for Event Record files has been added to the communication port interfaces. The user can now control the size of the file being transferred by specifying starting and ending event numbers as part of the file name.
- Improvements have been made to the algorithms for detecting IRIG-B, Remote Device Offline, and Direct Device Offline self-test errors to prevent nuisance detections.

Firmware Version 3.xx should run with Boot Code 1.11 or later.

Version 3.32

The features in this release are:

- GOOSE messaging has been made compatible with previous versions of 3.3x.
- Logic has been enhanced to allow the battery message to be cleared with the reset button on the front panel.

This firmware is backwards compatible to the 3.30 platform.

Firmware Version 3.xx should run with Boot Code 1.11 or later.

Version 3.30

For full details on firmware 3.30, view the document at http://www.geindustrial.com/products/software/ur/fw_330_notes.pdf

Firmware Version 3.xx should run with Boot Code 1.11 or later.

Version 3.20

The features in this release are:

- Mechanical jam, acceleration time protection, and three start supervision (M60)
- User-programmable self tests
- Support for solid state output and IEEE C37.94 compatible L90 communication card
- Enhancements to existing features

For further details on firmware 3.20, view the document at http://www.geindustrial.com/products/software/ur/fw_320_notes.pdf

Firmware Version 3.xx should run with Boot Code 1.11 or later.

Version 3.10

The features in this release are:

- Enhancements to Line Pickup (D30, D60, L60, L90)
- Enhancements to Directional Blocking Scheme (D60)
- Enhancements to Hybrid POTT Scheme (D60)
- Enhancements to MMS data items
- Requires enerVista UR Setup 3.10 or higher

For further details on firmware 3.10, view the document at http://www.geindustrial.com/products/software/ur/fw_310_notes.pdf

The B90 Bus Differential Relay is not supported by firmware release 3.10 and above.

Firmware Version 3.xx should run with Boot Code 1.11 or later.

Version 3.01

The features in this release are:

- L90 GPS-based channel asymmetry compensation
- User-programmable pushbuttons
- New peer-to-peer digital relay communications (Direct I/Os)
- Time synchronization via SNTP
- Voltage harmonics
- Support for B90 Bus Differential Relay

Firmware Version 2.xx should run with Boot Code 1.11 or later.

Version 2.91

The features in this release are:

- To allow the firmware to operate correctly with some hardware improvements made to the UR platform.

Version 2.90

The features in this release are:

- D60 Now available with single-pole tripping capability and dual-breaker single- and three-pole autorecloser
- C60 Now available with dual-breaker single- and three-pole autorecloser and fault locator

Version 2.84

The features in this release are:

- To support the new Real Time Clock circuitry that is available on a new release of the CPU
- To support some new hardware changes that were required due to obsolescence of some components

Version 2.83

The features in this release are:

- To correct an application weakness that does not allow the Direct Transfer Trip to operate correctly in L90 3 terminal application while in master slave mode. This does not affect L90 relays that are connected in two terminal applications

Version 2.82

The features in this release are:

- T35 TRANSFORMER RELAY RELEASE
 - The relay is a simplified version of the T60 but is capable of handling 3 DSP modules in order to provide for up to six restraints
- G60 GENERATOR RELAY RELEASE
 - A modern replacement for both DGP and SR489. All the key features of the two relays are available on the G60 (except distance backup)
- FlexElements (a universal comparator) has been added across the UR family.
- IEC-60870-5-104 protocol has been added across the UR family.
- Quadrilateral characteristic (D60)
- Series-Compensation Capability (D60)

Version 2.64

- To support new flash on CPU and provide a switch to turn off Battery Fail alarm

Version 2.63

- Improve security of the Distance elements in the 2.6x platform

Version 2.6x

The features in this release are:

- L60 FEATURES
 - Release of the Line Phase Comparison Relay
- M60 FEATURES
 - Thermal Model Motor Protection
 - Stator Differential
 - Current Unbalance

- Motor Start Inhibit
- Emergency Restart
- Negative Sequence Overvoltage
- PROTECTION FEATURES
 - Power Swing Blocking(D60)
 - Out Of Step Tripping(D60)
 - Volts/Hertz Protection(T60)
 - Over-frequency Protection(F60)
 - Negative Sequence Overvoltage(F60)
- OTHER FEATURES (All)
 - FlexLogic Operands for all Self-Tests
 - DNP 3.0 Definable Memory Map
 - 14.4k/28.8k/33.6k Baud Rates for RS485 Port
 - Full Duplex Ethernet (Requires Hardware Upgrade)

Version 2.4x

The features in this release are:

- New product B30 with 87B bus protection
- Energy metering on F35, F60, and C60
- Harmonics and THD metering on T60 and F60
- User default messages, latched user LEDs, and display of 3 currents on one display
- Trivial File Transfer Protocol (TFTP)
- Remote Device Status (On-line, Off-line) FlexLogic operands and self-tests.
- New Form-A output types (6L, 6M, 6N, 6P, 6R, 6S, 6T, 6U)
- Enhanced fault report
- One-shot operators added to FlexLogic
- 'RESET' added as FlexLogic operand (e.g. to reset latches)
- 3-Pole recloser modification with shot control and more timers
- Phase and neutral directional added to T60
- UCA/MMS object models updated to correspond to the 0.91 version of GOMSFE
- L90 87L element moved to Group Settings from Control
- Under-voltage feature accommodates phase to phase measurement when the VT is wye
- Select Before Operate (SBO) added for DNP3.0 Protocol
- Port settings added to allow IP Protocols to work with multiple URs behind a router
- Trip LED setting introduced to allow operation independent of contact outputs
- L90 channel test clear command added
- 'Minimum Response Time' setting added for RS485 com ports to deal with slow master devices
- Hi-Z High Impedance Fault Detection
- Hi-Z Oscillography Tripping Functionality