## **GE Digital Energy**

# PMCS v7.0 Release Notes

## **GE Publication Number: GER-4479**

Copyright © 2013 GE Digital Energy

## Overview

#### **Summary**

GE Multilin has released PMCS v7.0 which introduces the following features and enhancements:

- New screen designs for increased usability, efficient data usage and optimized presentation using Cimplicity v8.2
- Decreased commissioning time through enhanced PowerBuilder configuration tool
- Windows 7 64 bit, Windows Server 2008 -64 bit Operating System Compatibility
- Verified SQL Server 2008 64 bit database compatibility
- Upgraded communications capabilities
  - Virtual Mnemonics
  - o Updated Device Support (New devices, Updated firmware supported)
  - o Enhanced performance for UR/URPlus event and waveform file retrieval
- Defect fixes
- Simplified Licensing and Upgrade Options

## Release details

#### **Enhancements**

In the following enhancement descriptions, a revision category letter is placed to the left of the description. Refer to the Appendix at the end of this document for a description of the categories displayed.

# New screen designs for increased usability, efficient data usage and optimized presentation using Cimplicity v8.2

- Completely redesigned screen designs utilizing the latest Cimplicity v8.2 HMI features and Class-Object model
- New updated presentation components: layout, colors, images, text, labels, etc. Use of Smart Objects to provide richer usability experience
- Support for widescreen aspect ratio

#### E Decreased commissioning time through enhanced PowerBuilder configuration tool

The PowerBuilder configuration tool has been enhanced to provide auto population of device configuration information from communications server. Furthermore the GUI interface has been improved through pre-configured components to add and configure devices to reduce commissioning effort.

#### **E** Operating System Compatibility

PMCS v7.0 is now compatible with the following operating systems:

Supported Operating systems	Windows 7 Professional -64 bit
	Windows Server 2008 Standard R2 - 64 bit

#### Verified SQL Server 2008 – 64 bit database compatibility

PMCS v7.0 has been verified with SQL Server 2008. Included in the installation package is SQL Server 2008 – 64 bit Express Edition.

#### E Upgraded device communications capabilities

PMCS v7.0 incorporates upgraded communications capabilities with the following enhancements:

#### **C** Virtual Mnemonics

Virtual Mnemonics enables the scaling of data points retrieved from devices through EnerVista Integrator. Allows data points to be formatted prior to presentation by the HMI to increase HMI performance and decrease commissioning effort.

#### C Updated Device Support (New devices, Updated firmware supported)

#### Added new devices with event and waveform support:

- SR339 v1.3x, v1.4x
- SR345 v1.3x, v1.4x
- MET v12.02.02

#### Added new generic devices (No support for event and waveform retrieval)

- MN1000
- ML2400
- EPM1500/EPM4500
- EPM2200

#### Updated firmware support for the following devices:

Device	F/W Ver.
SR350	1.41
369	3.40
469	5.10
489	4.03
745	5.20
750	7.40
760	7.40
UR	5.90
URPLUS	1.80
MM300	1.50
MX350	1.20
F650	5.40
ELVS	4.50

#### Enhanced performance for UR/URPlus event and waveform file retrieval

Support for multithreading for retrieving event and waveform files over TFTP for UR and URPlus devices

#### Defect Fixes

This release of PMCS addresses the following defects:

#### GTU

GTU Total Power Calculation for Line to Load improvements using display logic.
 Depending upon connection type Power values will be shown on the Device screen.

Line to Load: Read the individual phase value registers, calculate the average and display the calculated value along with the individual phase.

Line to Line: Read the total Power register and display the value (In this case individual phase values will be displayed as N/A)

#### EPM9450/9650

- EPM9650 Device Screen revised to show Voltage Phase Voltage Phase Sequence (Phase rotation) as A-C-B to be consistent with EPM9650 screen display.
- Revised display method for consistent kWH values in EPM9650 wizard as compared with the device display and setting program display
  - o EPM9450/9650 wizard screens have been updated to poll and display the primary values for all the energy parameters.

#### C Simplified Licensing and Upgrade Options

PMCS options for Licenses, Viewers and Upgrades have now changed to the following:

#### PMCS v7.0 - Development Packages

Option	Order Code
PMCS Cimplicity Development Package - 100 Devices /5000 Points	PMCS-DEV01
PMCS Cimplicity Development Package - 300 Devices /30000 Points	PMCS-DEV03
PMCS Cimplicity Development Package - 500 Devices /65000 Points	PMCS-DEV05
PMCS Cimplicity Development Package - 1000 Devices /20000 Points	PMCS-DEV10

## PMCS v7.0 – Runtime Packages

Option	Order Code
PMCS Cimplicity Runtime Package - 100 Devices /5000 Points	PMCS-RUN01
PMCS Cimplicity Runtime Package - 300 Devices /30000 Points	PMCS-RUN03
PMCS Cimplicity Runtime Package - 500 Devices /65000 Points	PMCS-RUN05
PMCS Cimplicity Runtime Package - 1000 Devices /20000 Points	PMCS-RUN10

## PMCS v7.0 – Viewer Packages

Option	Order Code
PMCS Viewer - Cimplicity ViewNode Package	PMCS-VWRXX
PMCS Viewer - Cimplicity Web Viewer - 1 User License	PMCS-VWR01
PMCS Viewer - Cimplicity Web Viewer - 5 User License	PMCS-VWR05
PMCS Viewer - Cimplicity Web Viewer - 10 User License	PMCS-VWR10

## PMCS v7.0 – Development Upgrade Packages

Option	Order Code
PMCS Cimplicity Development Upgrade from 100 Devices /5000 points to 300/30000 Points Devices	PMCS-UD103
PMCS Cimplicity Development Upgrade from 100 Devices /5000 points to 500 Devices/65000 Points	PMCS-UD105
PMCS Cimplicity Development Upgrade from 100 Devices /5000 points to 1000 Devices/20000 Points	PMCS-UD110

PMCS Cimplicity Development Upgrade from 300 Devices /30000 Points to 500 Devices/65000 Points	PMCS-UD305
PMCS Cimplicity Development Upgrade from 300 Devices/30000 Points to 1000 Devices/20000 Points	PMCS-UD310
PMCS Cimplicity Development Upgrade from 500 Devices/65000 Points to 1000 Devices/20000 Points	PMCS-UD510

## PMCS v7.0 – Runtime Upgrade Packages

Option	Order Code
PMCS Cimplicity Runtime Upgrade from 100 Devices /5000 points to 300/30000 Points Devices	PMCS-UR103
PMCS Cimplicity Runtime Upgrade from 100 Devices /5000 points to 500 Devices/65000 Points	PMCS-UR105
PMCS Cimplicity Runtime Upgrade from 100 Devices /5000 points to 1000 Devices/20000 Points	PMCS-UR110
PMCS Cimplicity Runtime Upgrade from 300 Devices /30000 Points to 500 Devices/65000 Points	PMCS-UR305
PMCS Cimplicity Runtime Upgrade from 300 Devices/30000 Points to 1000 Devices/20000 Points	PMCS-UR310
PMCS Cimplicity Runtime Upgrade from 500 Devices/65000 Points to 1000 Devices/20000 Points	PMCS-UR510

## PMCS v6.31 to PMCS v7.0 Upgrade

Option	Order Code
PMCS v7.0 Upgrade from PMCS v6.31 Cimplicity Development Package	PMCS-UPD67
PMCS v7.0 Upgrade from PMCS v6.31 Cimplicity Runtime Package	PMCS-UPR67

# **Appendix**

## **System Requirements**

Component	Requirement	
Supported Operating	Windows 7 Professional - 64 bit	
systems	Windows Server 2008 Standard R2 – 64 bit	
Computer and	Recommended (Server):	
processor	<ul> <li>Single processor: AMD Opteron™ 4122, 4C 2.2GHz, 3M L2/6M L3, 1333Mhz Max Memory</li> <li>Additional processor: AMD Opteron™ 4122, 4C 2.2GHz, 3M L2/6M L3, 1333Mhz Max Memory</li> <li>8GB Memory (8x1GB),1333MHz Single Ranked UDIMM for 2 Procs, Sparing</li> <li>500GB 7.2K RPM SATA 3.5" Hot Plug Hard Drive</li> <li>RAID 1 for PERC H200 and H700 Controllers, x8 Chassis</li> <li>PERC H200 Integrated RAID Controller, 8HD</li> <li>750 Watt Redundant Power Supply</li> <li>2x NEMA 5-15P to C13 Wall Plug, 125 Volt, 15 AMP, 10 Feet (3m), Power Cord</li> <li>Baseboard Management Controller</li> <li>Network Adapter: 2x Intel PRO 1000PT 1GbE Single Port NIC, PCI</li> </ul>	
Memory	USB Keyboard and Optical Mouse  2GB of RAM (minimum), 8GB (recommended)	
Hard disk	1GB of free hard disk space for installation (additional space required for project configuration).	
Display	17" monitor, minimum resolution 1920 x 1080, minimum 16-bit color	
Connectivity	Ethernet (10BASE-T)	
Other	N/A	

## **Change categories**

This document uses the following categories to classify the changes.

**Table 1: Revision categories** 

Code	Category	Comments
N	New feature	A separate feature added to the relay. Changes to existing features even if they significantly expand the functionality are not in this category
G	Change	A neutral change that does not bring any new value and is not correcting any known problem
E	Enhancement	Modification of an existing feature bringing extra value to the application
D	Changed, incomplete or false faceplate or user interface indications	Changes to, or problems with text messages, LEDs, user pushbuttons or other user interface elements
R	Changed, incomplete or false relay records	Changes to, or problems with relay records (oscillography, demand, fault reports, etc.)
С	Protocols and communications	Changes to, or problems with protocols or communication features
М	Metering	Metering out of specification or other metering problems
Р	Protection out of specification	Protection operates correctly but does not meet published specifications (example: delayed trip)
U	Unavailability of protection	Protection not available in a self-demonstrating way so that corrective actions could be taken immediately
Н	Hidden failure to trip	Protection may not operate when it should
F	False trip	Protection may operate when it should not
В	Unexpected restart	Relay restarts unexpectedly

The revision category letter is placed to the left of the change description.

## Multilin technical support

Multilin contact information and call center for product support is shown below:

GE Digital Energy – Grid IQ Center 650 Markland Street Markham, Ontario Canada L6C 0M1

Telephone: 905-927-7070 or 1-800-547-8629 (North America), +34 94 485 88 00 (Europe)

Fax: 905-927-5098 (North America), +34 94 485 88 45 (Europe)

E-mail: multilin.tech@ge.com

Home Page: <a href="http://www.GEDigitalEnergy.com/multilin">http://www.GEDigitalEnergy.com/multilin</a>