

## OptoEMU Sensor README

This documents lists the new features, enhancements and bug fixes for the OptoEMU Sensor energy monitoring units (OPTOEMU-SNR-3V and OPTOEMU-SNR-DR1). Changes to the OptoEMU Sensor Manager are listed in a separate document.

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### Version R3.0b

December 7, 2012

Firmware: R9.2b

Program: R3.0b

#### Bug Fixes

KB82148 - A problem has been corrected where the Data Connectors were reporting a device type of OPTOEMU-SNR-3V even for the OPTOEMU-SNR-DR1 and OPTOEMU-SNR-DR2.

KB82569 - Addressed issues with eSight and how timestamps are handled. A new URL Path must be obtained from them. The old web service called ImportDataSingle has been replaced with a new one called ImportDataSingleWithTimeStamp.

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### Version R3.0a

March 30, 2012

Firmware: R9.2b

Program: R3.0a

#### Major changes

- Added support for Modbus inputs.
- Added a Standard XML data connector.
- Added support for the OPTOEMU-SNR-DR1.

#### Enhancements

- Data connectors can now be set to upload data at various intervals.
- The frequency of data logging can now be adjusted.

#### Bug Fixes

[KB81448](#) PAC Project applications set OptoEMU's time.

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**Version R2.0a**

August 31, 2011

Firmware: R9.1a

Program: R2.0a

**Major Changes**

- The OptoEMU Sensor Manager is now the only user interface for the OptoEMU Sensor. Use it for initial setup, configuration, maintenance, and troubleshooting. The Sensor's internal web pages are no longer available with the 2.0 firmware.
- Support for Google PowerMeter has been removed. Google is shutting down the PowerMeter service on September 16, 2011.
- Added support for eSight Energy. Please visit their site at [www.esightenergy.com/OptoEMU.htm](http://www.esightenergy.com/OptoEMU.htm) for more information.

**Enhancements**

For pulse inputs, the behavior of long pulses has been improved.

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**Version R1.1b**

August 31, 2011

Firmware: R9.1a

Program: R1.1b

**Bug Fix**

[KB81381](#) Total energy values (kWh) for pulse inputs are 0.0 for Modbus and OptoMMP applications.

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**Version R1.1a**

April 21, 2011

Firmware: R9.1a

Program: R1.1a

**New Feature**

Added a public interface for the Sensor's measurements and configuration settings. This is made available in two ways:

1. PAC Control IDB File - A special PAC Control 9.0 IDB with just the public interface. This is then usable from PAC Display, OptoDataLink, and OptoOPCServer.

2. Scratch Pad - The public values are also available through the Sensor's OptoMMP Scratch Pad interface. This provides support for PAC controller peer-to-peer, Modbus/TCP, and EtherNet/IP. For more information, see the OptoEMU Sensor Communication Guide (form 1958).

#### Enhancements:

Time syncing has been improved. The following changes have been made since the 1.0 release:

- No longer require an initial time sync the first time an EMU is powered up. Instead, only require the initial time sync for logging to start.
- Any attempt at time syncing will now first try the Daytime protocol on port 13. If that fails, it will then try the HTTP GET method on port 80. It will only be considered a failure if both attempts fail.
- If an online service is being used and a time sync fails, log an error and keep trying every 60 seconds.
- If no online service is being used and a time sync fails, do not log an error.
- The EMU will always attempt a time sync at powerup and every 24 hours thereafter.
- If no online service is enabled, and then one is enabled, the Sensor will attempt a time sync.

#### Bug Fixes:

[KB81235](#) - Energy accumulation precision values.

[KB81244](#) - Pulsed inputs are not logged to online software service.

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#### **Version R1.1a**

February, 11 2011

Firmware: R9.1a

Program: R1.0a

Initial Release

How to Get Help

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If you have any questions about this product, contact Opto 22 Product

Support Monday through Friday, 8 a.m. to 5 p.m., Pacific Time.

Website: <http://www.opto22.com>

E-mail: [support@opto22.com](mailto:support@opto22.com)

Phone: 800/TEK-OPTO (835-6786)  
951/695-3080

Fax: 951/695-3017