

GE Communicator

Advanced Setup, Logging, Visualization, and Analysis Software for EPM Meters

GE Communicator is an easy-to-use software application to setup and maintain EPM meters as well as view data and generate reports to support analysis. It provides advanced visualization functionality including graphing/trending values; viewing waveforms/log records; and generating customizable reports. Furthermore, with MeterManager, meters can be grouped together, meter diagnostics and status can be determined, and data can be automatically retrieved at intervals for report generation. Using database structures, the stored metering information is available for integration into third-party software packages for further use or actions. GE Communicator connects to meters locally or remotely using the meters' supported communications protocol via a USB, Serial, Ethernet, or Modem communications connection.

There are two versions of GE Communicator available – GE Communicator (which is downloadable and included with a GE EPM meter purchase and a GE Communicator Professional (Licensed) version which requires a license key to activate.

GE Communicator allows users to configure meters, send settings files, download data logs manually from meter memory, and view data charts/graphs and basic waveforms. The GE Communicator Professional (Licensed) version adds additional features including automatic/scheduled retrieval of meter data logs; creation/email of spreadsheet reports; and additional PQDIF, COMTRADE, and HHF file generation.

Key Benefits

- User-friendly software interface for easy setup and commissioning of EPM meters
- Simplified and accurate data collection and presentation of key, real-time collected meter information such as voltage, current, power and energy, time of use, power quality, harmonics, waveforms, alarm/limits, and I/O status
- Support for integration with other software packages with ODBC-compliant database structures
- Two versions – GE Communicator for setup and basic data visualization and GE Communicator (Licensed) for meter system setup, automated data retrieval, and advanced visualization and analysis

Applications

- Setup, commissioning, and ongoing maintenance of GE EPM meters
- Ongoing centralized data collection of GE EPM meter data
- Analysis and post-event data analysis using GE EPM meter data information

Easy to use, low-effort setup

- User-friendly software interface for easy setup and commissioning of EPM meters
- Consistent, low-effort setup of multiple meters and systems
- Retain setup settings for transfer and future maintenance

Advanced Data Visualization

- Simplified data collection and presentation of key, real-time collected meter information such as voltage, current, power and energy, time of use, power quality, harmonics, waveforms, alarm/limits, and I/O status
- Visualize power quality data with charting/graphing including CBEMA, ITIC, and waveform information

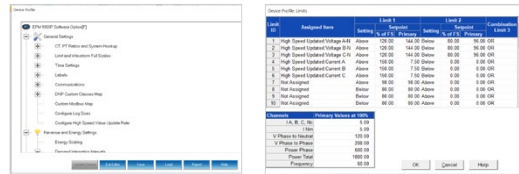
Actionable Analysis

- View and compare multiple values, circuits, and waveforms from one or more events
- Easily zoom/pan, mark, and add annotations to waveform records for detailed analysis
- Baseline and monitor data for impact and performance reviews



Easy Meter Setup and Configuration

GE Communicator provides an easy-to-use interface to set up, configure, and optimize EPM meters to meet the metering application needed. By organizing meter setup and making it consistent across the multiple metering systems, users can enter specifications needed to make the most out of their metering investment both at initial commissioning and during maintenance.



Configure Meter Settings

View Real-Time Data

GE Communicator connects to EPM meters to view real-time data remotely and safely. Examples of data that can be viewed include voltage, current, power, and energy; time of use and accumulations; power quality; harmonic magnitudes; real-time waveform scopes; alarms and limits; max. and min. for each parameter; and I/O device information.



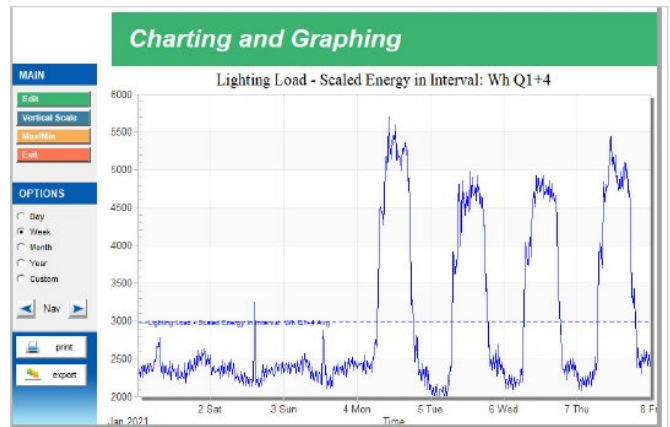
View Waveform Data

View Logged Data

The Log Viewer provides charting and graphing using database-driven, normalized data from GE EPM meters. The charts and graphs provide concise visualization in order to help interpret retrieved data support analysis.

Features include:

- Tabular data format to support spreadsheets
- Multi-pen charting and graphing
- View data by month, day, or year
- Plotted max. and min. values
- Zoom and pan of graphs
- Support for cut/paste into other applications



Visualize/Trend Energy Data

Advanced Power Quality Visualization, Charting, and Graphing

GE Communicator supports advanced visualization of power quality information in various industry standard formats including a scatter graph, providing CBEMA plotting information. The CBEMA plot gives definition to the severity of events and their effect on equipment. For example, if multiple events fall outside the CBEMA tolerances, the monitored equipment may be damaged. Furthermore, visualizations such as 3D plots and histograms with frequency and severity of power quality events can also be shown.

- View ITIC, Semi F47, CBEMA, and other industry-standard graphs
- View time waveform events using millisecond resolution
- Sort data by fault type
- Compare information from circuits
- Review impact of changes to protective equipment
- Monitor and analyze performance metrics
- Conduct post/forensic analysis of events
- View cycle-by-cycle RMS trends



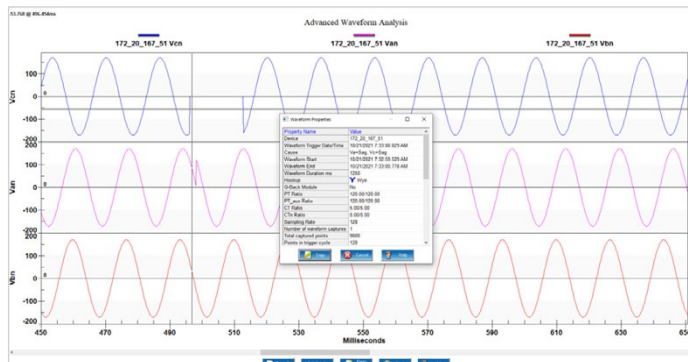
View CBEMA and Other Power Quality Indices

View Waveform Records

GE Communicator provides easy-to-use visualization of waveform data for fast and simple analysis. Various views illustrate stored information graphically such as phasors for easy troubleshooting, as well as waveforms of events caused by power quality problems, faults, transients and other conditions.

Features include:

- View, zoom/pan, and compare multiple waveforms from one or more events
- Conduct harmonic analysis of waveform data using harmonic magnitudes, peak value, and RMS readings per cycle
- Add databased annotations to waveform records



Analyze Waveform Records

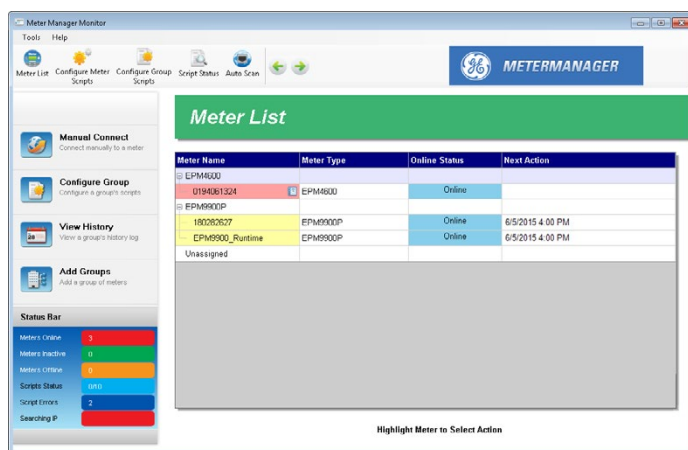
GE's MeterManager

Meter Management System

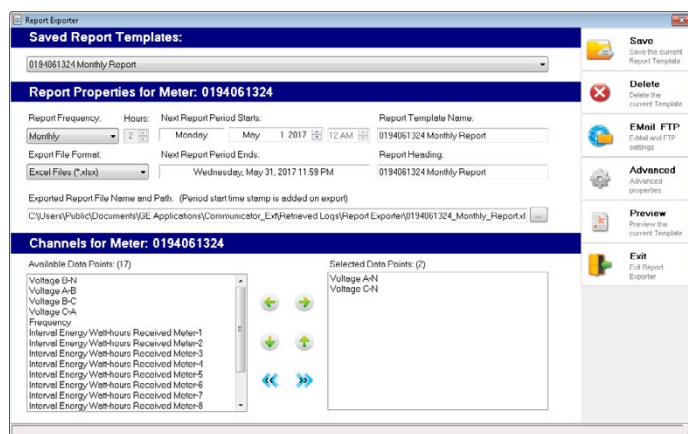
GE's MeterManager is available with the GE Communicator Professional licensed version and provides comprehensive meter management, report generation, and data collection for up to 1,200 Ethernet-connected meters.

Key features include:

- Automated Meter Network Connection – ability to scan configurable IP address ranges on networks to automatically find Ethernet-connected EPM meters allowing users to focus on data versus setting up data collection
- Organize meters into groups – group, manage, and view meters by classifications/attributes such as location, type, download interval, and name
- App Launcher - launch into other apps associated with that meter (e.g., View meterlogs; view energy aggregator dashboard)
- Multi-threaded data collector – automatically download and collect meter data
- Automatic meter report generator - generate customized reports and send them to users on programmed intervals
- Meter integrity analytics - scan meters for poor connection quality and check for installations issues such as reverse CTs and firmware data management
- Meter health scans - automatically scans fleet of installed meters periodically to check that they are online, functional, and installed properly
- Automated email status reporting - automatically receive email notifications if a meter loses network connection to quickly resolve issues without losing data
- Diagnostic reporting tools – the system produces error logs, status logs, and many other diagnostic tools for forensic analysis of complete system integrity



Group and See Status of Meters



Configure Automatic Reports

Automated Status, Report Generation, and Export

GE's MeterManager Report Exporter provides a design of customized reports of meter data. Reports can be generated for individual or groups of meters and can be set up for automatic report generation on specific intervals (i.e., hourly, multi-hourly, daily, weekly, or monthly). Report Exporter can also export reports via email and upload reports via FTP to a central location for viewing.

Additional features of Report Exporter include:

- Ability to add mathematical formulas to the report to further process the data and highlight key information (e.g., calculating the highest demand for a period, or average energy use for a metered area)
- Save the report to a .CSV or a spreadsheet file for easy integration into other applications
- Add computed channels of data, which aggregate a time period from another channel to generate a new data channel in the report

FEATURE	GE COMMUNICATOR	GE COMMUNICATOR PROFESSIONAL (LICENSED)
Setup and configure GE EPM meters	•	•
Database storage of collected information for SQL searches and data mining	•	•
View basic charts and graphs; basic power quality waveform viewer	•	•
Scan, find, and group Ethernet meters on a network		•
Auto-collect data using MeterManager automation server tools		•
Detect installation and quality of service issues		•
Create and email spreadsheet reports automatically on a set schedule		•
Generate PQDIF, COMTRADE, and HHF files		•
Integration to GE Energy Aggregator – Energy dashboard/reporting		•

Technical Specifications

System Requirements – GE Communicator

	SYSTEM REQUIREMENTS
Supported Operating Systems	<ul style="list-style-type: none"> • Windows 11® Operating System • Windows Server® 2012 R2 • Windows Server® 2016 • Windows Server® 2019
Memory	<ul style="list-style-type: none"> • 16 GB RAM
Storage	<ul style="list-style-type: none"> • 1TB
Other	<ul style="list-style-type: none"> • 1440 x 768 display resolution • MS .NET Framework 4

Ordering Codes

ORDER CODE	DESCRIPTION
PLSOFT-COM1	GE Communicator Professional - 1 Year - Software License
PLSOFT-COM5	GE Communicator Professional - 5 Year - Software License

GEGridSolutions.com

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