

1-2-3-DONE

POWERetc's METSyS Logger and Custom Report Generator Package makes it super-easy to setup and conduct NEC 220.87 (Exception Method) connected load studies.

The **POWERetc / METSyS Logger package** makes it as simple as 1-2-3

1

Hookup

- **Place** the ultra-compact **METSyS Logger** inside the enclosure.
- **Attach** PROSyS Rogowski coils included in the **POWERetc package** for each phase and neutral (optional).
- **Monitor** for 100 hours on the current logger's fully charged internal battery and use the package's external power supply and voltage clips for 30-day NEC 220.87 studies.

2

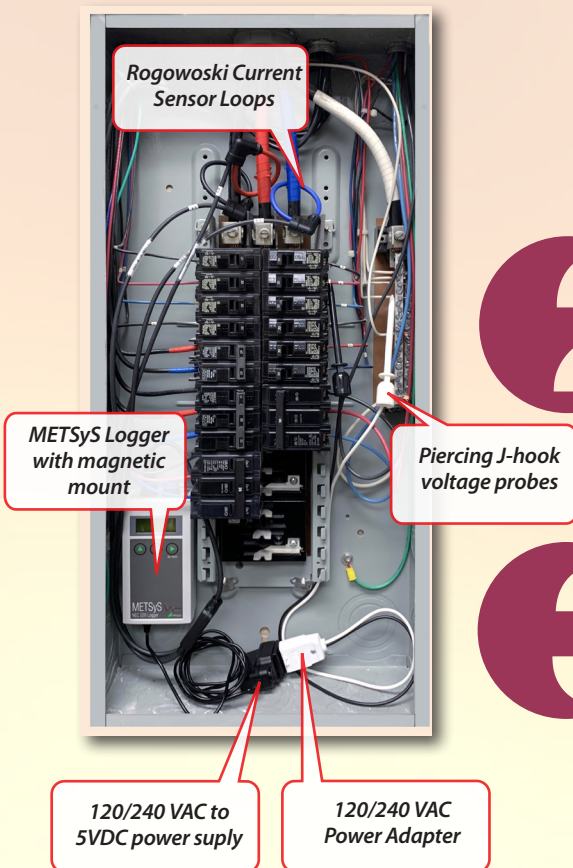
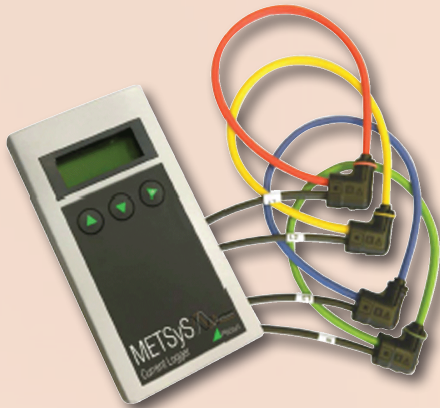
Setup

- **Turn** Bluetooth ON and **Pair** the METSyS mobile app with the METSyS logger.
- **Label** the study.
- **Select** the averaging interval to 15 seconds.
- **Set** the study duration to 30 days.

3

Retrieve/Report

- **Select / Download** a METSyS logging session. (Logging session plots data to the screen)
- **Take** a screen shot of plot, save to photo's or email (optional, but a good practice).
- **Email** log for later processing with Excel macro.
- **Create** perfect reports with the **POWERetc** report generator. The proprietary Excel spreadsheet Macro takes all the mystery out of the equation.



Create Clear, Concise Load Study Reports

The **NEC 220.87 (Exception Method)** connected load study involves collecting average current data in 15-minute intervals, continuously recorded over 30 days. (Note: Sometimes readings are verified after 7-days to verify that panel capacity exists, but the full 30-day period will be required, especially when electrical permits are required.)

The powerful Excel macro developed by, and only available from, **POWERetc** makes it easy to comply with NEC standards – while creating easy-to-read load study reports.

The Excel macro also calculates and plots the continuous load, identifies the maximum continuous load (MCL) and the adjusted MCL (AMCL). [NOTE: A continuous load is defined, by the NEC, as a load that is present continuously for 180-minutes (3-hours).]

The **POWERetc** macro walks you through a series of screens – from analyzing the load characteristics to producing the final report.

You **Set Up** analyses according to preference, such as:

- Panel ampacity
- Seasonal adjustments
- Planned additional load

You can **Customize** formatting and images, including:

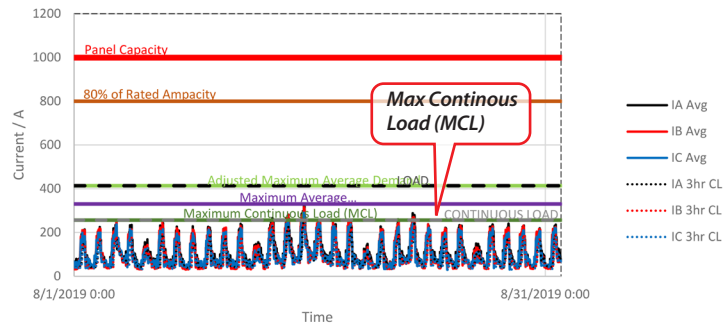
- Report title
- Images at top right and/or left top
- Text at bottom

GMC INSTRUMENTS



NEC 220.87 Sample Report

Start Time 8/1/2019 0:00 Location POWERetc Corporation
End Time 8/31/2019 23:45 3350 Scott Blvd., Bldg 55
Duration 744:00 hours Santa Clara, CA 95054 USA
Log Interval 15 minutes
Readings 2976 Source 30-day1000.csv

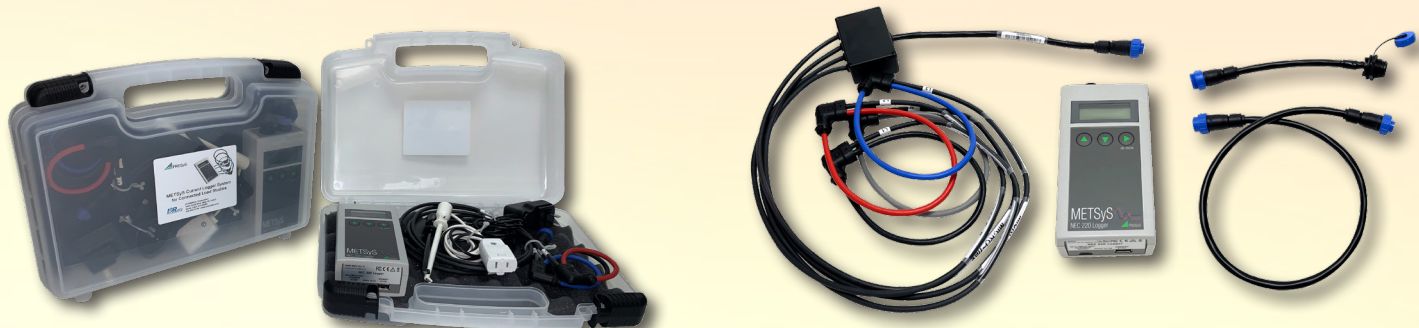


| | | | | | |
|---|------|-------|-----|-----|----------|
| Panel Circuit Breaker Rating | 1000 | | | | based on |
| 80% Value of CB rating | 800 | | | | highest |
| | | phase | | | loaded |
| | | A | B | C | phase |
| Connected Load Study | | | | | |
| Maximum Average Demand (MAD) | 331 | 316 | 290 | 331 | |
| Adjusted MAD (125% of MAD) | 414 | 395 | 363 | 414 | |
| Seasonal Adjustments | 0 | | | | |
| Known non-operating loads | 0 | | | | |
| Total Connected Load (NEC 220.87 Exception method.) | 414 | 395 | 363 | 414 | |
| Maximum 3-hour Continuous Load (MCL) | 257 | 252 | 227 | 257 | |
| Base Load (Minimum Average Demand) | 36 | 31 | 30 | 36 | |
| Available Capacity Continuous Load (Amps/Phase) | 543 | 548 | 573 | 543 | |
| Available Capacity Cont. & Non-Cont (Amps/Phase) | 586 | 605 | 638 | 586 | |
| Plan/Projected Load Analysis | | | | | |
| Planned Additional Load (Amps/Phase) | 0 | | | | |
| Projected Load w/addition (Amps/Phase) | 414 | 395 | 363 | 414 | |
| Projected Remaining Load Capacity | | | | | |
| Planned Additional Continuous Load % | 62% | 64% | 63% | | |
| Projected Continuous Load | 257 | 252 | 227 | 257 | |
| Projected Remaining Continuous Load Capacity | | | | | |
| Projected Continuous Load | 543 | 548 | 573 | 543 | |
| Inrush Evaluation | | | | | |
| Peak RMS Inrush/Interval | | | | | |
| (8-cycle average max/sample period – sample period average) | 224 | 221 | 222 | 224 | |

METSy530Day.xlsx

3/19/2021

POWERetc Corporation
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Santa Clara CA 95054 USA
(408) 540-3199



The POWERetc METSs Logger package comes complete with current probes and auxiliary power supply. The package is equipped with a choice of PROSs current probes. (Standard diameters: 2", 6" and 15". Other sizes available on special order.)

This special accessory package is designed for permanent installation in 480 V cabinets. Included are a 4-phase, 6" diameter MicroFlex current probe assembly rated at 4000A, a thru-panel cabinet adapter/connector and exterior jumper cable to connect the METSs logger to the cabinet connector plug.



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