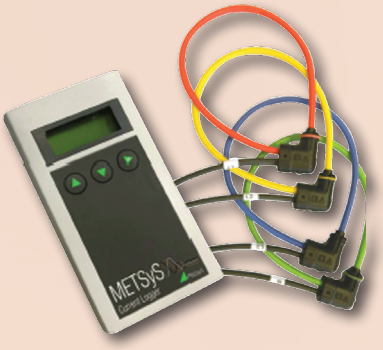
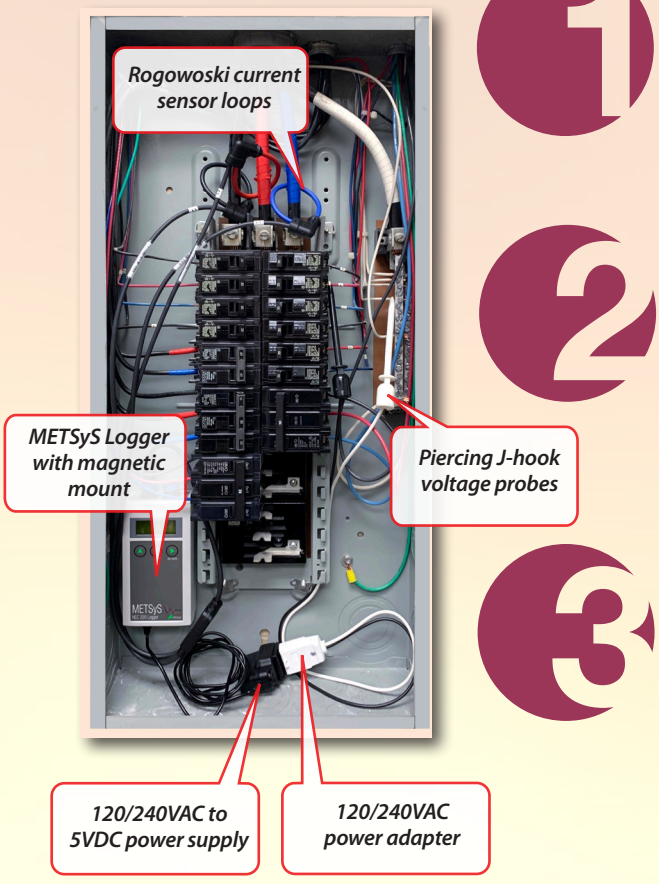
The perfect panel capacity tool to correctly conduct and report the results of NEC 220.87 connected load studies



Conducting a connected load study anytime a new load is to be added to a panel is often required to comply with the National Electrical Code. These studies are time-consuming to conduct and chances are you aren't reporting the results properly.

Now there is a fool-proof way to perform NEC 220.87 studies and produce reports that will always pass electrical inspection.

POWERetc's METSyS Current Logger and Custom Report Generator Package makes it super-easy to set up and conduct NEC 220.87 (Exception Method) connected load studies. It's a easy as **1-2-3-DONE!**



1 Hookup

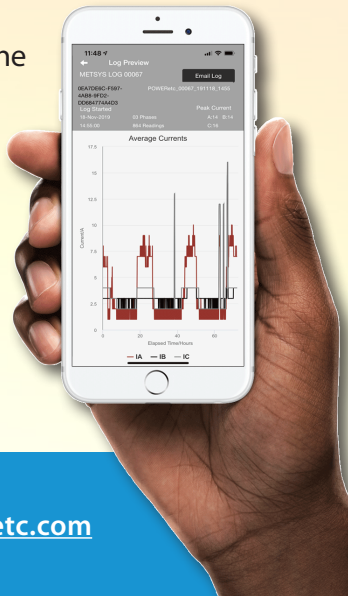
- **Place** the ultra-compact METSyS Logger with magnetic mount inside the panel
- **Attach** the PROSyS Rogowski coils included in the package for each phase and neutral
- **Connect** the package's power supply and voltage clips

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

- **Download** a METSyS logging session to the app
- **Take** a screenshot of plot, save to photos or email (optional, but a good practice)
- **Email** a log for later processing with the proprietary spreadsheet Excel macro
- **Create** perfect reports with the *POWERetc* report generator (The macro takes all the mystery out of the equation – see an example report on the next page.)



The METSys Current Logger Package is available for rent or purchase exclusively from POWERetc. Contact us today.

POWERetc Corporation (0) 408 540-3199 / info@poweretc.com / www.poweretc.com

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 checked after seven days to verify that panel capacity exists, but the full 30-day study should be conducted, 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 (three hours).

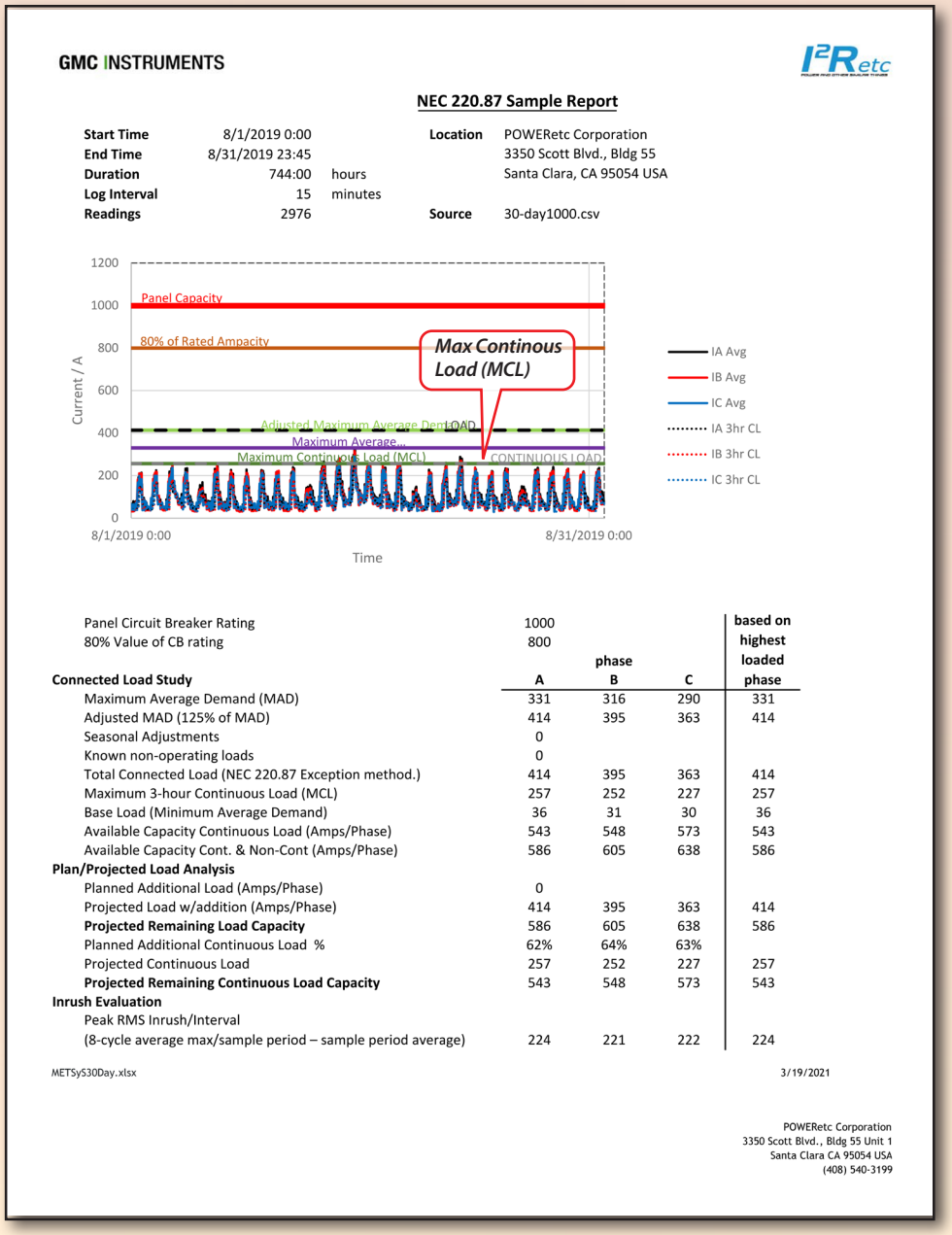
The *POWERetc* macro walks you through a series of screens – from analyzing the load characteristics to producing the final report.

You **Set Up** the analysis 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

I²Retc

NEC 220.87 Sample Report

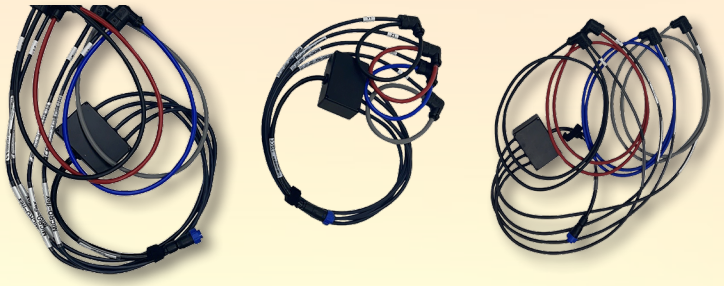
Start Time	8/1/2019 0:00		**Location**	POWERetc Corporation
End Time	8/31/2019 23:45			3350 Scott Blvd., Bldg 55
Duration	744:00	hours		Santa Clara, CA 95054 USA
Log Interval	15	minutes		
Readings	2976		**Source**	30-day1000.csv

				based on highest loaded phase
Panel Circuit Breaker Rating	1000			
80% Value of CB rating	800			
		phase		
Connected Load Study	**A**	**B**	**C**	
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	586	605	638	586
Planned Additional Continuous Load %	62%	64%	63%	
Projected Continuous Load	257	252	227	257
Projected Remaining Continuous Load Capacity	543	548	573	543
Inrush Evaluation				
Peak RMS Inrush/Interval				
(8-cycle average max/sample period – sample period average)	224	221	222	224

METSyS30Day.xlsx 3/19/2021

POWERetc Corporation
3350 Scott Blvd., Bldg 55 Unit 1
Santa Clara CA 95054 USA
(408) 540-3199

TThe POWERetc METSyS Logger package comes complete with current probes and an auxiliary power supply. The package is equipped with a choice of PROSyS current probes.



Three standard probe sets are offered as part of the METSyS Logger package. The ProSyS probes are offered with 3", 6" and 15" diameter coils, each with three phase heads plus neutral (four heads).

The METSys Current Logger Package is available for rent or purchase exclusively from POWERetc. ***Contact us today.***

I²Retc
POWER AND OTHER SIMILAR THINGS

POWERetc Corporation
3350 Scott Blvd., Bldg 5503 / Santa Clara, CA
95054 USA / (0) 408 540-3199 / (M) 408 666-6500
info@poweretc.com / www.poweretc.com

July 2024