

Excel NERC Report

Streamlining NERC battery monitoring and management with Excel

[Book a web meeting with BatteryDAQ to go through details.](#)

Table of Contents

1. Overview	2
1.1 Introduction	2
1.2 Features	2
2. Preparation	3
2.1 Requirements for computer and software	3
2.2 Installation steps	3
3. Configuration	6
3.1 Add or change battery banks	6
3.2 Change Alert Settings	7
4. Operation	8
4.1 Buttons and Functions	8
4.2 Generate NERC Report	9
4.3 Save Report	10
4.4 Trending History	11
4.5 History Data Maintenance	12
5. Update to Newer Version	13
6. Information for IT Security Scan	14
7. Troubleshooting	15

1. Overview

1.1 Introduction

Objectives: to provide a reliable and transparent battery management and NERC report software for stringent IT security environment.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Al
1	Index	Active	AssetTag	PlantName	DtuID	String#	IAddress	Go	Location	FacilityUnit	BatteryModel	Brand	Type	Year	Mfr'd	CellNo.	Updated
2	1	1	7004477	Arlington	12510	1	10.16.100.221	Go	Bartiw, FL 33830	PB1	16OPzS2000	BAE	1	2003	24	1/14/19 16:01	
3	2	1	7004473	Topaz-1	12511	118	72.167.223.197	Go	Bartiw, FL 33830	PB1	16OPzS2000	BAE	1	2003	60	11/29/19 9:49	
4	3	1	7004469	Topaz-2	12512	120	72.167.223.197	Go	Bartiw, FL 33830	PB1	16OPzS2000	BAE	1	2003	60	12/2/19 18:51	
5	4	0	7004465	Hines	12513	4	72.167.223.197	Go	Bartiw, FL 33830	PB1	16OPzS2000	BAE	1	2003	60	10/21/18 0:00	
6	5	0	7004461	Salem	12514	5	72.167.223.197	Go	Bartiw, FL 33830	PB1	16OPzS2000	BAE	1	2003	60	10/21/18 0:00	
7	6	1	7004457	Madison	12515	123	72.167.223.197	Go	Bartiw, FL 33830	PB1	16OPzS2000	BAE	6	2003	60	1/19/19 8:07	
8	7	1	7004453	Springfield	12516	7	192.168.1.222	Go	Bartiw, FL 33830	PB1	12V	BAE	6	2003	60	12/24/18 9:20	
9	8	1	7004449	labtest	13047	1	192.168.1.222	Go	Bartiw, FL 33830	PB1	16OPzS2000	BAE	1	2003	60	12/2/19 18:51	
10	9	1	7004445	Kingston	12518	9	192.168.1.218	Go	Bartiw, FL 33830	PB1	16OPzS2000	BAE	1	2003	60	12/24/18 9:20	
11	10	1	7004441	Greenville	12519	1	71.166.97.36	Go	Bartiw, FL 33830	UPS1	12V	BAE	6	2003	60	1/10/19 19:18	
12	11	1	7004441	Greenville	12519	1	71.166.97.36	Go	Bartiw, FL 33830	UPS2	12V	BAE	6	2003	60	1/10/19 19:26	
13	12	1	7004433	Chester	12521	1	192.168.1.222	Go	Bartiw, FL 33830	PB1	16OPzS2000	BAE	1	2003	60	12/2/19 18:51	
14	13	1	7004429	Arlington	12522	109	72.167.223.197	Go	Bartiw, FL 33830	PB1	16OPzS2000	BAE	1	2003	24	7/13/19 10:23	
15	14	1	7004425	Clinton	12523	110	72.167.223.197	Go	Bartiw, FL 33830	PB1	16OPzS2000	BAE	1	2003	24	7/13/19 10:26	
16	15	1	7004421	Franklin	12524	123	72.167.223.197	Go	Bartiw, FL 33830	PB1	16OPzS2000	BAE	6	2003	60	1/14/19 13:48	
17	16	1	7004417	Hines	12525	16	72.167.223.197	Go	Bartiw, FL 33830	PB1	16OPzS2000	BAE	1	2003	60	12/24/18 9:10	
18	17	1	7004413	Salem	12526	17	72.167.223.197	Go	Bartiw, FL 33830	PB1	16OPzS2000	BAE	1	2003	60	12/24/18 9:10	
19	18	1	7004409	Madison	12527	18	72.167.223.197	Go	Bartiw, FL 33830	PB1	16OPzS2010	BAE	1	2003	60	12/24/18 9:10	
20	19	1	7004405	Springfield	12528	19	72.167.223.197	Go	Bartiw, FL 33830	PB1	16OPzS2000	BAE	1	2003	60	12/24/18 9:10	
21	20	1	7004401	Riverside	12529	1	71.166.97.36	Go	Bartiw, FL 33830	PB1	16OPzS2000	BAE	6	2003	60	1/10/19 19:26	
22	21	1	7004397	Kingston	12530	21	72.167.223.197	Go	Bartiw, FL 33830	PB1	16OPzS2000	BAE	1	2003	60	12/24/18 9:10	
23	22	1	7004393	Greenville	12531	1	71.166.97.36	Go	Bartiw, FL 33830	PB1	16OPzS2000	BAE	6	2003	60	1/10/19 19:18	
24	23	1	7004389	Fairfield	12532	23	72.167.223.197	Go	Bartiw, FL 33830	PB1	16OPzS2000	BAE	1	2003	60	12/24/18 9:10	
25	24	1	7004385	Chester	12533	1	71.166.97.36	Go	Bartiw, FL 33830	PB1	16OPzS2000	BAE	6	2003	40	1/10/19 19:26	
26	25	1	7004381	Arlington	12534	110	72.167.223.197	Go	Bartiw, FL 33830	PB1	16OPzS2000	BAE	1	2003	24	7/13/19 10:21	
27	26	1	7004377	Clinton	12535	26	72.167.223.197	Go	Bartiw, FL 33830	PB1	16OPzS2000	BAE	1	2003	60	12/24/18 9:10	
28	27	1	7004373	Franklin	12536	27	72.167.223.197	Go	Bartiw, FL 33830	PB1	16OPzS2000	BAE	1	2003	60	12/24/18 9:10	
29	28	1	7004369	Hines	12537	28	72.167.223.197	Go	Bartiw, FL 33830	PB1	16OPzS2000	BAE	1	2003	60	12/24/18 9:10	
30	29	1	7004365	Chester	12538	29	72.167.223.197	Go	Bartiw, FL 33830	PB1	16OPzS2000	BAE	1	2003	60	12/24/18 9:10	
31	30	1	7004361	Arlington	12539	30	72.167.223.197	Go	Bartiw, FL 33830	PB1	16OPzS2000	BAE	1	2003	60	12/24/18 9:10	
32																	

Battery data is pulled from remote site and analyzed with parameters on "settings" page.

P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG
Updated	Alarm	Voltage	Current	Ripple	Room(°F)	Pilot(°F)	AvgVol.	MinVol.	MaxVol.	RefIR	AveIR	MaxIR	Above%	StddevIR%	InterTier	InterRack	Notes
1/14/19 16:01	-1	0	0	0	0	0	0.000	0	0	0.35	0	0	0.0	0.0	16,46	31	.
12/6/19 14:03	1	134.9	1.2	-1159.9	72.14	71.24	2.249	2.231	2.303	0.35	0.327	0.386	10.3	4.1	16,46	31	.

1.2 Features

- To manage hundreds of battery banks within one Excel workbook
- To collect real-time battery data from remote BatteryDAQ monitoring systems
- To automatically analyze battery data with set thresholds and highlight rows with alarm
- To prepare NERC report automatically with real-time battery data and date/time stamp
- To highlight weak cells on NERC report
- To plot trending chart with remote archived data, which is stored in SD card in Sentry units.
- No database is required.
- Transparent code for IT security inspection
- Easy to add/remove/enable/disable a battery bank
- Easy to set alarm thresholds for different battery types without tedious setting to each battery bank.
- Easy to sort at any column with all Excel convenience.

2. Preparation

Because NERC Workbook is a pure Excel with Microsoft's functions, there is no installation needed.

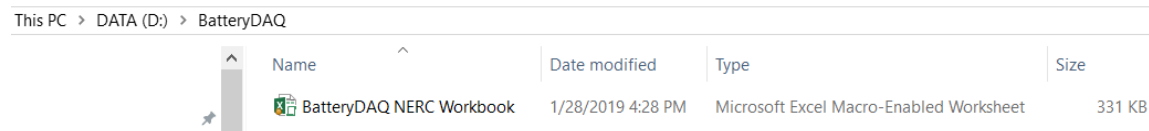
2.1 Requirements for computer and software

- 1) Windows 7/8/10/11 (Windows XP is not supported)
- 2) Compatible with 32-bit and 64-bit Excel 2007, 2013 or later versions (Microsoft Office license is provided by user, not by/from BatteryDAQ.)
- 3) For Excel 2007, Microsoft Office Add-in "save as pdf" needs to be installed.
- 4) RAM memory 4G and above
- 5) Disk free space, 100G and above

2.2 Installation steps

Software is an Excel macro enabled workbook "BatteryDAQ NERC Workbook.xlsx". Filename might be different, and the filename doesn't affect functions. When receive it by email, make sure it is not filtered/blocked by email server.

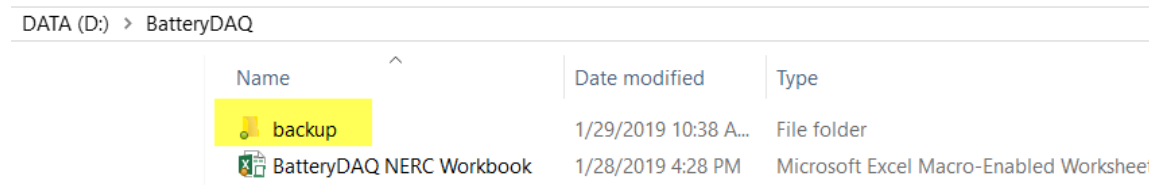
Step-1: Make a folder on your disk, copy "BatteryDAQ NERC Workbook.xlsx" file to there.



This PC > DATA (D:) > BatteryDAQ

Name	Date modified	Type	Size
BatteryDAQ NERC Workbook	1/28/2019 4:28 PM	Microsoft Excel Macro-Enabled Worksheet	331 KB

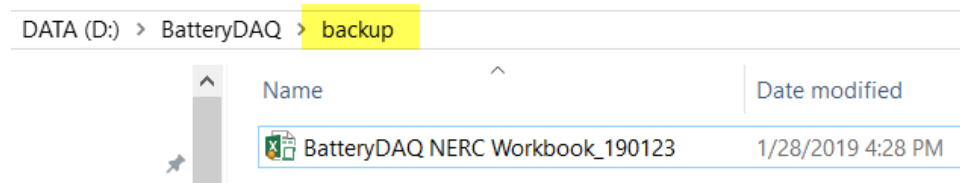
Step-2: Make a folder "backup", save Excel workbook and later modified versions in that folder.



DATA (D:) > BatteryDAQ

Name	Date modified	Type
backup	1/29/2019 10:38 A...	File folder
BatteryDAQ NERC Workbook	1/28/2019 4:28 PM	Microsoft Excel Macro-Enabled Worksheet

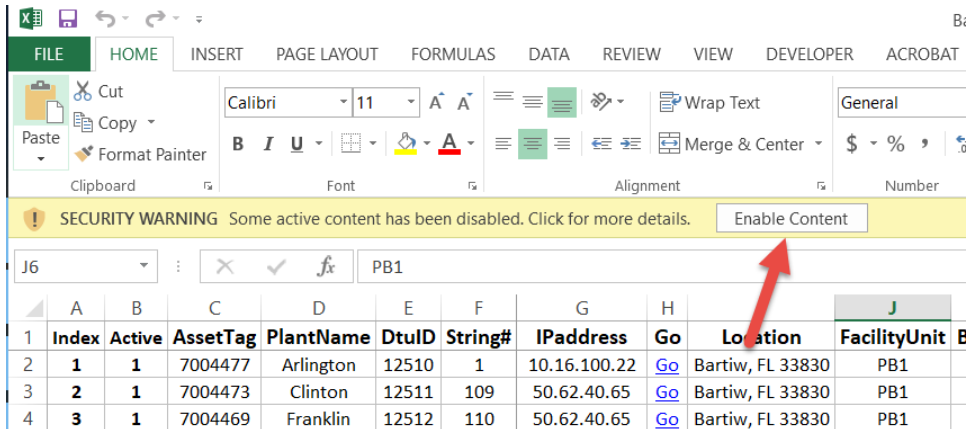
It is recommended to save modified workbook to other safe place as well in case messed up the working copy.



DATA (D:) > BatteryDAQ > backup

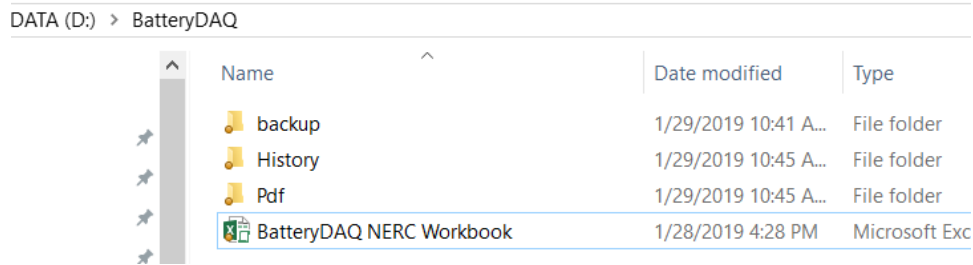
Name	Date modified
BatteryDAQ NERC Workbook_190123	1/28/2019 4:28 PM

Step-3: Go back to the folder with working copy. Click Excel workbook to open it. "Enable Content". If necessary, go Excel options to enable Macro.

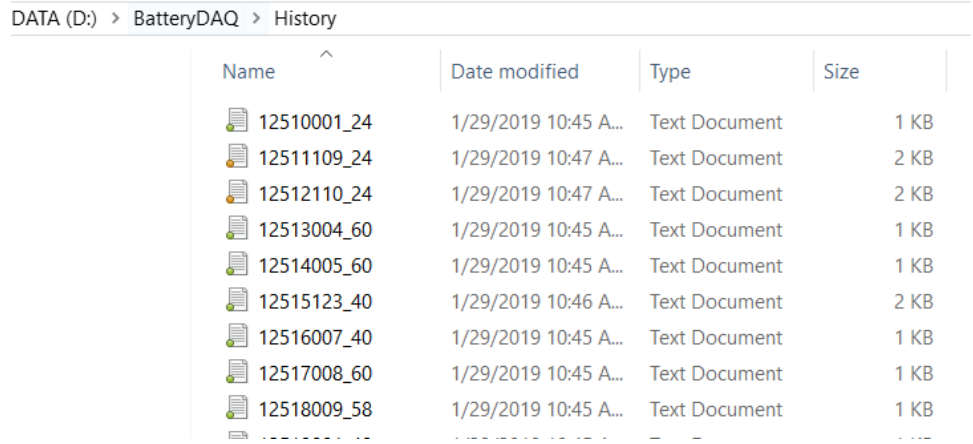


When the Workbook runs, it will check the existence of two folders and create them if needed.

In case your computer has security setting to prevent folder creating, just manually create "History" and "Pdf" folders.



History folder, battery history data will be achieved in this folder. Each battery bank has its own filename.

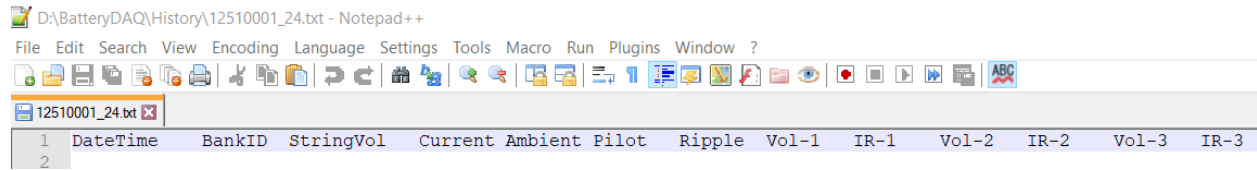


Filename example: 12512001_24

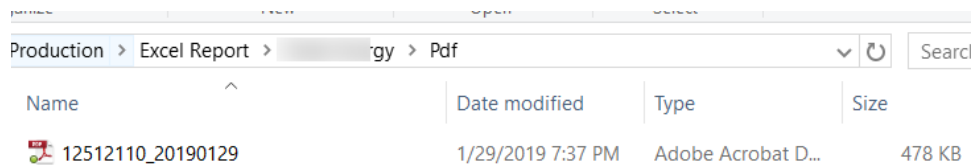
DTU ID: 12512

String#: 001

Battery Number: 24 (If change battery number for that string, Workbook will create another filename so battery data can match the text file head.



Pdf folder, after you choose the battery string and create NERC report, you may save it as pdf for archiving. It is recommended to have bank identification and date information for the filename.



3. Configuration

Caution: do not add or delete any column(s). If you do need to add/remove column(s), ask BatteryDAQ to update the Workbook.

3.1 Add or change battery banks

Configuration can be viewed and modified on “Home” sheet.

1	7004357	Clinton	12540	31					
<table border="1"> <tr> <td>Home</td> <td>NERC</td> <td>Trend</td> <td>Settings</td> <td>+</td> </tr> </table>					Home	NERC	Trend	Settings	+
Home	NERC	Trend	Settings	+					

Index shall be between 1 to 10,000 **continuous (Recommended but not enforced)** and **unique number**. If the worksheet has been sorted with other column, sort with Index to find out the maximum number and continue after that.

	A	B	C	D	E	F	
1	Index	Active	AssetTag	PlantName	DtuID	String#	IPac
2	1	1	7004477	Arlington	12510	1	10.16
3	13	1	7004429	Arlington	12522	13	50.6
4	25	1	7004381	Arlington	12534	25	50.6
5	30	1	7004361	Arlington	12539	30	50.6
6	42	1	7004313	Arlington	12551	42	50.6
7	54	1	7004265	Arlington	12563	54	50.6
8	59	1	7004245	Arlington	12568	59	50.6
9	71	1	7004197	Arlington	12580	71	50.6
10	83	1	7004149	Arlington	12592	83	50.6
11	88	1	7004129	Arlington	12597	88	50.6
12	100	1	7004081	Arlington	12609	100	50.6
13	112	1	7004033	Arlington	12621	112	50.6
14	117	1	7004013	Arlington	12626	117	50.6
15	129	1	7003965	Arlington	12638	129	50.6
16	141	1	7003917	Arlington	12650	141	50.6
17	146	1	7003897	Arlington	12655	146	50.6

Add/register new bank with continuous and unique index value.

The line item can be copied and pasted as regular Excel content, then modify to correct value.

Only update the content in Excel line item. Do NOT right click to delete or insert line because that will mess up the command buttons.

If a battery bank is offline, it shall be set “Active” to 0. [Active: 1, Inactive 0]

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Index	Active	AssetTag	PlantName	DtuID	String#	IPaddress	Location	FacilityUnit	BatteryModel	Brand	Type	Year Mfr'd	CellNo.
2	1	1	7004477	Arlington	12510	1	10.16.100.22	Bartiw, FL 33830	PB1	16OPzS2000	BAE	1	2003	24
3	2	1	7004473	Clinton	12511	109	50.62.40.65	Bartiw, FL 33830	PB1	16OPzS2000	BAE	1	2003	24
4	3	1	7004469	Franklin	12512	110	50.62.40.65	Bartiw, FL 33830	PB1	16OPzS2000	BAE	1	2003	24
5	4	0	7004465	Hines	12513	4	50.62.40.65	Bartiw, FL 33830	PB1	16OPzS2000	BAE	1	2003	60
6	5	0	7004461	Salem	12514	5	50.62.40.65	Bartiw, FL 33830	PB1	16OPzS2000	BAE	1	2003	60
7	6	1	7004457	Madison	12515	123	50.62.40.65	Bartiw, FL 33830	PB1	16OPzS2000	BAE	6	2003	40
8	7	1	7004453	Sorinfield	12516	7	50.62.40.65	Bartiw, FL 33830	PB1	16OPzS2000	BAE	1	2003	60

N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD
CellNo.	Updated	Voltage	Current	Ripple	Room(°F)	Pilot(°F)	AvgVol.	MinVol.	MaxVol.	RefIR	AveIR	MaxIR	Above%	StdevIR%	InterTier	InterRack
24	12/23/18 19:39	0	0	0	0	0	0.000	0	0	0.35	0	0	0.0	0.0	16,46	31
24	12/29/18 20:44	57.6	87.7	0	27.2	29.2	2.402	2.335	2.424	0.35	0.33	0.375	7.1	5.5	16,46	31
24	12/29/18 20:44	57.4	89.4	0	27.8	29.9	2.392	2.358	2.414	0.35	0.38	0.427	22.0	5.2	12524	31
60	10/21/18 0:00	0	0.3	0.2	78.2	81.3	2.135	2.078	2.243	0.35	0.372	0.427	22.0	7.2	16,46	31
60	10/21/18 0:00	0	0	2.6	25.5	0	0.000	0	0	0.35	0	0	-100.0	0.0	Refresh	31
40	12/29/18 20:44	535.6	0.4	3.2	25.4	27	13.400	13.247	13.619	10	11.85	19.36	93.6	13.6	Report	31
60	12/24/18 9:20	0	0	0	0	0	0.000	0	0	0.35	0	0	0.0	0.0	Trend	31
60	12/24/18 9:20	0	0	0	0	0	0.000	0	0	0.35	0	0	0.0	0.0	16,46	31
60	12/24/18 9:20	0	0	0	0	0	0.000	0	0	0.35	0	0	0.0	0.0	16,46	31
40	12/29/18 20:44	535.6	0.1	0	13.5	15.1	13.402	13.126	13.57	5	4.802	6.38	27.6	8.4	Re-Config	31
60	12/24/18 9:09	0	0	0	0	0	0.000	0	0	0.35	0	0	0.0	0.0	16,46	31
60	12/24/18 9:09	0	0	0	0	0	0.000	0	0	0.35	0	0	0.0	0.0	16,46	31
24	12/29/18 20:44	57.6	87.7	0	27.2	29.2	2.402	2.335	2.424	0.35	0.33	0.375	7.1	5.5	16,46	31
24	12/29/18 20:45	57.4	89.4	0	27.8	29.9	2.392	2.358	2.414	0.35	0.38	0.427	22.0	5.2	16,46	31
40	12/29/18 20:45	535.6	0.4	3.2	25.4	27	13.400	13.247	13.619	10	11.85	19.36	93.6	13.6	16,46	31

Reload configuration to work book by clicking on “Re-Config”.

3.2 Change Alert Settings

Check “Setting” sheet for parameters.

Caution: Do not add rows or columns to this page.



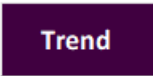

1	Report Sheet Settings	Parameter Name (Do NOT Change Cell/Data Position)														
2	Data Refresh Interval (hrs)	RefreshInterval	1	(Continous)												
3	Data Archive Interval (hrs)	SaveInterval	24	Do Not change												
4	Data Archive Fold	Folder	\History	Do Not Set												
5																
6																
7																
8																
9																
10	[Start from Row-11, maximum 10 sets of parameters]															
11	Alarm Thresholds	Parameter Name	Type-1	Type-2	Type-3	Type-4	Type-5	Type-6	Type-7	Type-8	Type-9	Type-10				
12	Battery classifications	dType	1	2	3	4	5	6	7	8	9	10				
13	Type Name	dTypeName	Vented-1	Vented-2	VRLA-1	.	.	VRLA-12V				
14	Nominal Cell Voltage(V)	dNominalVol	2	2	2	0	0	12	0	0	0	0				
15	Recommended Float Voltage	dRcmVol	2.23	2.23	2.23	0	0	13.35	0	0	0	0				
16	Cell Float Voltage High	dHighVol	2.35	2.45	2.47	0	0	14.2	0	0	0	0				
17	Cell Float Voltage Low	dLowVol	2.21	2.23	2.25	0	0	12.8	0	0	0	0				
18	Cell Discharge Voltage Low	dDischargeVol	1.85	1.85	1.8	0	0	10.8	0	0	0	0				
19	Internal Resistance High(%)	dIrrHigh	30	35	35	0	0	40	0	0	0	0				
20																

Save the workbook, go “Home” sheet, “Re-Config” to load new parameters

4. Operation

When this Excel book is opened and macro is enabled, it will start polling data from remote BatteryDAQ devices via TCP/IP connection.

4.1 Buttons and Functions

Function Button	Description	Notes
	When open workbook, check configurations for battery banks. If correct, click "Click to Poll Data".	Make sure to start pulling. Otherwise data will remain as previous pull.
	Choose the battery bank you want to report or view battery data at cell level, click "Report", it will activate the NERC sheet with updated data.	Report will display the row you have chosen.
	Choose the battery bank you want to review the trend.	It may take few seconds to download history data from remote unit.
	When configuration has been changed, it shall be reloaded to software. <ol style="list-style-type: none">1) New battery bank is added or removed.2) IP Address has been changed.3) String# (MID) has been changed.4) CellNo./Battery number has been changed.	When cell/battery number has been changed, the history data file shall be adjusted accordingly. You may delete the earlier file (save to other location before delete if needed.) Otherwise, it will have error because the data doesn't match to cell number.

4.2 Generate NERC Report

Click on “Report”, workbook will prepare battery data and site information to fill “NERC” sheet.

Check the data/time to make sure you have recent battery data.

The screenshot shows an Excel spreadsheet with the following data and charts:


DUKE ENERGY FOSIL-HYDRO GENERATION STATIONARY BATTERY INSPECTION REPORT							
Plant	Madison	Battery Type/Model	16OPzS2000	ANNUAL INSPECTION	<input type="checkbox"/>	Index	6
Facility/Unit	PEB	Manufacturer	BAE	Year Mfr'd	2003		
Number of Cells	40	Recomm. Float Voltage	89.2		2.23		
IP Address	30.62.40.65	BMS Modbus ID	123	(overall)		(per cell)	
Level, Cell Temperature, Overall Current, AC Ripple Current, AC Ripple Voltage, Check for Grounds.							
Annual: Specific Gravity, Visual Inspect Every Cell, Visually Inspect Rack, Verify Continuity of String.							
Float Voltage	535.7 V	DC Bus Voltage:					
Float Current	0.3 A	Volt to Gnd (+/-):	/				
AC Ripple Voltage	1.57696 V	Charge Output Volts:					
AC Ripple Current	3.2 A	Charge Output Amps:					
Batt Room Temp	25.7 °C	Check for Grounds:	<input type="checkbox"/>				
Update on	1/29/2019 19:35	Visual Inspection Rack:	<input type="checkbox"/>	(Annual)			
BankID	12515123	Visual Inspection of All Cells:	<input type="checkbox"/>	(Annual)			
		Verify String Continuity:	<input type="checkbox"/>	(Annual)			
Work Order No.:		Inspection by:		Date:			
Comments/Corrective Action:							
Previous Annual Inspection:							
Next Annual Inspection:				Report Reviewed by:			
Previous Capacity Test (date):				Date:			
Previous Capacity (%):							
Next Capacity Test (date):				Corrective Work Order No:			
(Capacity test req'd every: 5 years vented, 2 years VRLA)							
Cell No.	Cell Voltage	Internal Resistance	Intercell Conn. Res.	Note	Electrolyte Level	Cell Temp.	Specific Gravity (Annual)
1	13.369	12.28		T	<input type="checkbox"/> OK <input type="checkbox"/> ADD	<input type="checkbox"/> OK	

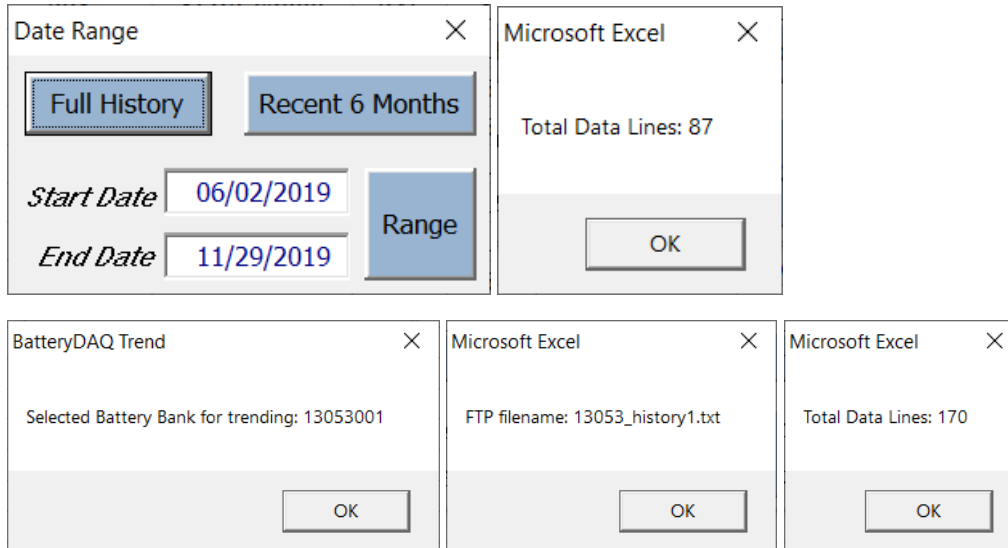
The three bar charts on the right show data for 40 cells:

- Cell Voltage (V):** Y-axis ranges from 13.0 to 13.7. Values fluctuate between approximately 13.2 and 13.6.
- Internal Resistance (mohm):** Y-axis ranges from 0 to 25. Values fluctuate between approximately 5 and 20.
- Connection Resistance (mohm):** Y-axis ranges from 0 to 1.2. Values are mostly near 0.

4.4 Trending History

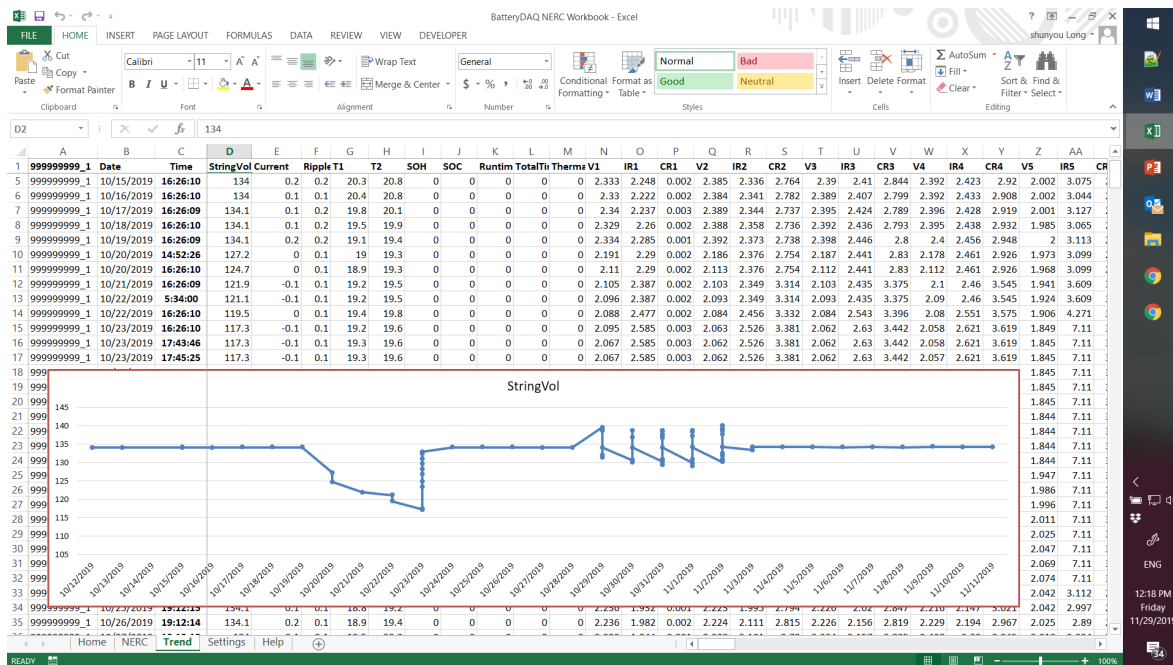
Click on the line item on "Home" sheet to select battery bank for trending.

Click "Trend" , choose a date range. It will pull achieved data from SD card in remote Sentry DTU (800EX version only).



Click on any column, the chart will be updated for string data or cell data.




There are options to retrieve recent 6 months data or full history. Click on BLUE button to switch between them.



4.5 History Data Maintenance

Each time Excel pulls historical data from remote SD Card, it will also make a copy to local \history folder.

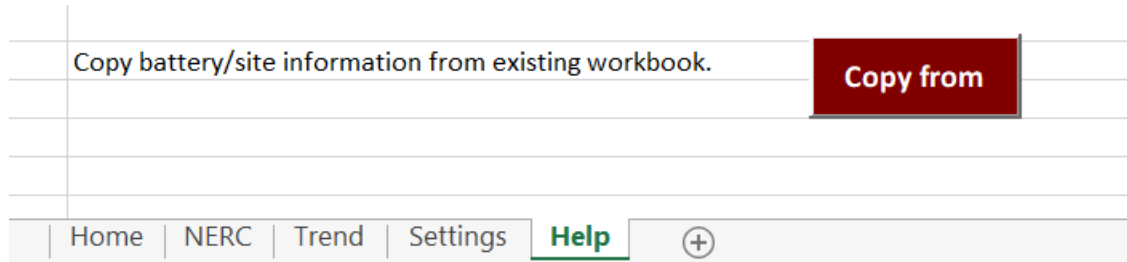
Earlier copies can be deleted if no longer needed.

Name	Date modified	Type	Size
 12510001_24ftp3	11/29/2019 12:15 ...	Text Document	99 KB
 12510001_24ftp2	11/29/2019 12:15 ...	Text Document	99 KB
 12510001_24ftp1	11/29/2019 12:14 ...	Text Document	99 KB

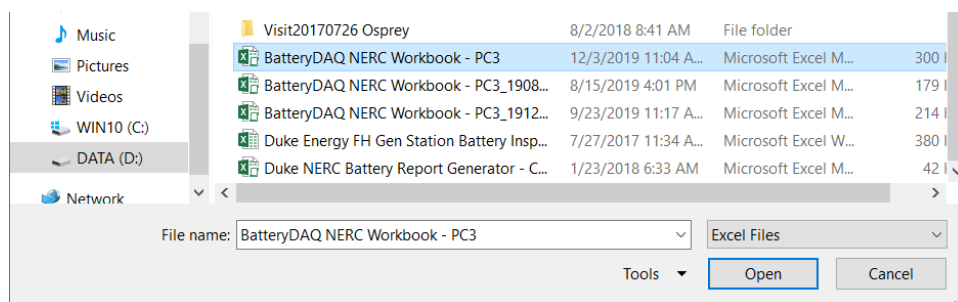
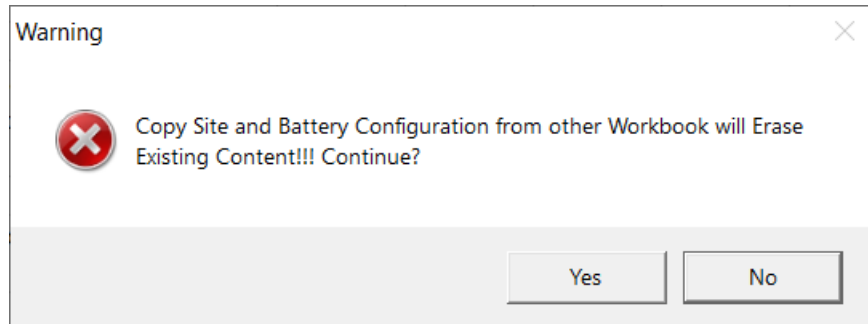
5. Update to Newer Version

In case a newer version is needed, you may use the “Copy: function on “Help” Sheet.

Close the old version. Open the newer version, go “Help” sheet.



Warning



In any case you made a mistake, or that is not what you wanted, simply just not to save it. Quit Excel without save anything.

If you are satisfied with the content, save Excel workbook to a different name and use that for your work.

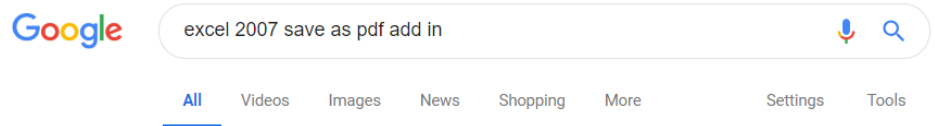
6. Information for IT Security Scan

Software Component	Description	Notes
Excel	Microsoft Office standard 32/64-bit Excel 2007 and later version	
Excel VBA code	Programmed by BatteryDAQ. Copyright belongs to BatteryDAQ. All functions are pure Excel/Microsoft functions. Code is transparent and can be reviewed by IT. The NDA needs to be signed before allowing access to VBA code.	Passcode protected Contact BatteryDAQ
TCP Socket	Microsoft Socket Functions (Not a 3 rd party component.) Establish TCP/IP connection with remote units, close it after receiving data. Modbus-TCP protocol	

7. Troubleshooting

7.1 The newer version after 2022.12 will be compatible with 32-bit and 64-bit.

7.2 "Save as pdf" function doesn't work for Excel2007 if the add in not installed. You can obtain it from Microsoft.



About 26,400,000 results (0.52 seconds)

Download 2007 Microsoft Office Add-in: Microsoft Save as PDF or XPS ...

<https://www.microsoft.com/en-us/download/details.aspx?id=7>

May 17, 2016 - Microsoft Download Manager is free and available for download now. This download allows you to export and save to the PDF and XPS formats in eight 2007 Microsoft Office programs. It also allows you to send as e-mail attachment in the PDF and XPS formats in a subset of these programs.

2007 Microsoft Office Add-in: Microsoft Save as PDF or XPS

Important! Selecting a language below will dynamically change the complete page content to that language.

Select Language:

English

Download

This download allows you to export and save to the PDF and XPS formats in eight 2007 Microsoft Office programs. It also allows you to send as e-mail attachment in the PDF and XPS formats in a subset of these programs.

Microsoft recommends

Select the check box next to any downloads you'd like to add to your queue. After clicking Next, You'll be guided through a simple download process.

MSN default homepage & Bing default search engine
Set MSN as your default homepage and Bing as your default search engine
Size: 2.8 MB

The 2007 Microsoft Office Suite Service Pack 3 (SP3)
Service Pack 3 provides the latest updates to the 2007 Microsoft Office Suite. This update also applies to Microsoft Office Project, Microsoft Office SharePoint Designer, Microsoft Office Visio, and Visual Web Developer.
Size: 351.9 MB

Office 2003 Service Pack 3 (SP3)

Download Summary:

KBMBGB

1. 2007 Microsoft Office Add-in: Microsoft Save as PDF or XPS

Total Size: 934 KB

No thanks and continue DirectX End-User Runtime Web Installer

Install it and restart Workbook. Check "Save as pdf" function.

7.3 Sometime, "Go" hyperlink is very slow

IPaddress	Go	Loca
10.16.100.22	Go	Bartiw, I
50.62.40.65	Go	Bartiw, I
50.62.40.65	Go	Bartiw, I

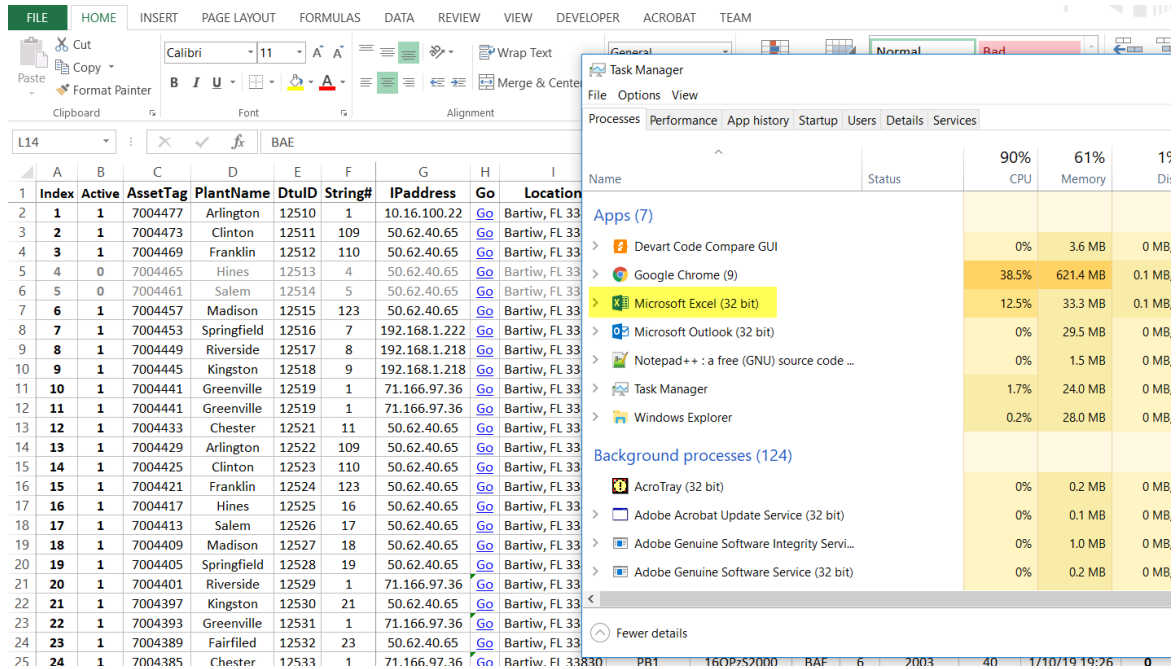
Because Microsoft Excel 2013 opens it very slow. That is a known problem for Microsoft.

<https://answers.microsoft.com/en-us/msoffice/forum/all/excel-2013-internet-hyperlinks-slow-to-open/d8cdb242-87b8-4e30-ab9a-8f72984b1899>

7.4

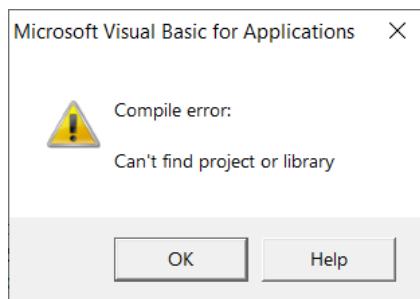
In any case you wish to close the Workbook but when it is busy, it may not response.

Use Task Manager to end the task.



7.5

Compile error: Can't find object or library



Open this Workbook, do not start "Scan".

Excel → Developer → Visual Basic → Tools → Reference

Uncheck Missing library, OK, save, restart computer.