Receiving and Inspection

Please check the items against your order. Parts, harness/leads might be re-packed for specific site.

1. Typical Sentry-6002NEMA System

#	Cat#	Name	Quantity	Check
1	ST-6002NEMA	Sentry-6002NEMA unit	1	☐
2	CT-SCY10-300A	Split core current transducer, 40x104mm window	1	☐
3	CM-SHUNT-250A	Shunt current transducer, with adapter SSA-AN [Split core or Shunt, not both]	1	☐
4	LTTB2N	2" ID flex tubing, 5FT (may cut to shorter length onsite)	1	☐
5	CA-TW20-xx	RS485 twisted wire, default 10FT (check length against your order)	1	☐
6	HMI-GT02	HMI (default one for each site but client may not order)	1	☐
7	CA-12P-xx	Pre-made cables for ST-6002, labeled as #1 to #12 (specified length 20FT, 30FT, 40FT or 50FT)	12	☐
8	TL1-OT-xx	O-ring leads (500mA) with correct ring size	120	☐
9	TL1-OT-xx-10A	10A IR fused lead with correct ring size (labeled as 10A)	5	☐
10	DTU-800EX	DTU-800 (installed in main unit)	1	☐
11	SFP-100M	Fiber to Ethernet converter (Optional, if purchased, it will be pre-mounted on DTU-800)	1	☐

2. Typical Sentry-2402NEMA System

#	Cat#	Name	Quantity	Check
1	ST-2402NEMA	Sentry-2402NEMA unit	1	☐
2	CT-SCY10-300A	Split core current transducer, 40x104mm window	1	☐
3	CM-SHUNT-250A	Shunt current transducer, with adapter SSA-AN [Split core or Shunt, not both]	1	☐
4	LTTB2N	2" ID flex tubing, 5FT (may cut to short onsite)	1	☐
5	CA-12P-xx-3.5R	Pre-made cables for ST-2402 with right angled 3.50mm terminal, labeled as #1 to #4	4	☐
6	TL1-OT-xx	O-ring leads (500mA) with proper ring size	50	☐
7	TL1-OT-xx-10A	10A IR fused lead	3	☐
8	CA-TW20-xx	RS485 twisted wire, default 10FT (connect to DTU in main unit)	1	☐

3. Special Items Checklist

Item	Description	Check
1	**Confirm battery model, post size, configuration, and layout for each site.** Prepare a spreadsheet to collect necessary information for each site. Battery layout may require different cable length. Refer to online guide for Site Survey: https://batterydaq.com/site-survey-power-plants-substations/	☐
2	**Current Transducer** Default: Split-core Hall CT SCY10-300Q Optional: Shunt CT. For battery with more than TWO sets of posts, shunt CT cannot be installed. It must be changed to Hall CT. Calibrate zero for both shunt and hall CT.	☐
3	**Unistrut for battery rack** Unistrut shall be pre-cut, prepare necessary hardware to mount Unistrut to battery rack.	☐
4	**Mounting on concrete wall** Necessary hardware for concrete wall. Use a NEMA template provided by BatteryDAQ.	☐
5	**10A leads** Shall have **5** pcs for each Sentry-6002NEMA unit and **3** pcs for a Sentry-2402 unit. 10A lead O-ring size shall match post size.	☐
6	**Conduit, cable duct/track, cable organization materials** Those materials are not coming with Sentry-6002NEMA unit.	☐
7	**Shunt connection cable and hardware** For most cases, shunt can be installed on terminal plate. When installing shunt in line within battery string, additional battery cables are needed. Shunt hole size is 5/16". For 2 posts, bolt cable lugs on back-to-back to shunt.	☐

4. Power on Test

If this is your first time installing BatteryDAQ product, we strongly recommend you do a power on test in your office before going to site.

For the first time order, it shall come with a power adapter for test.
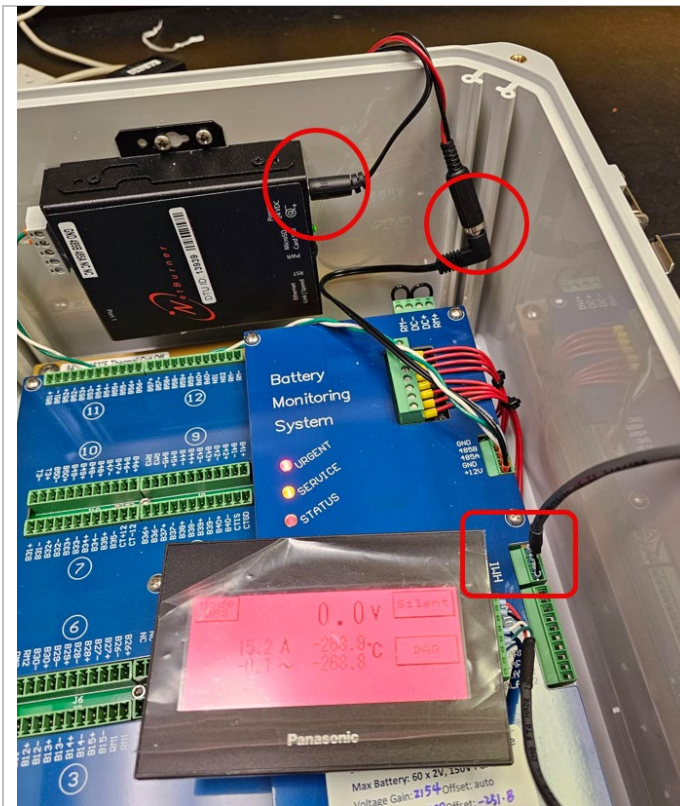
Unplug the power plug from DTU, use the adapter to power on both the Sentry-6002NEMA unit and the DTU.

The 3 LEDs shall be lighted up and flash.

Plug in the HMI, you shall see data on touch screen.

Play around the touch screen functions to get familiar with data and settings.

As far as you don't confirm **SAVE**, all input data/parameters will be lost after power off cycle.

Because the temperature probes are not connected, HMI will have very low temperature reading.
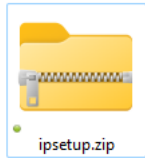
Do NOT change anything at this moment.

5. IPSetup Software

This is a tool software for IP address configurations.

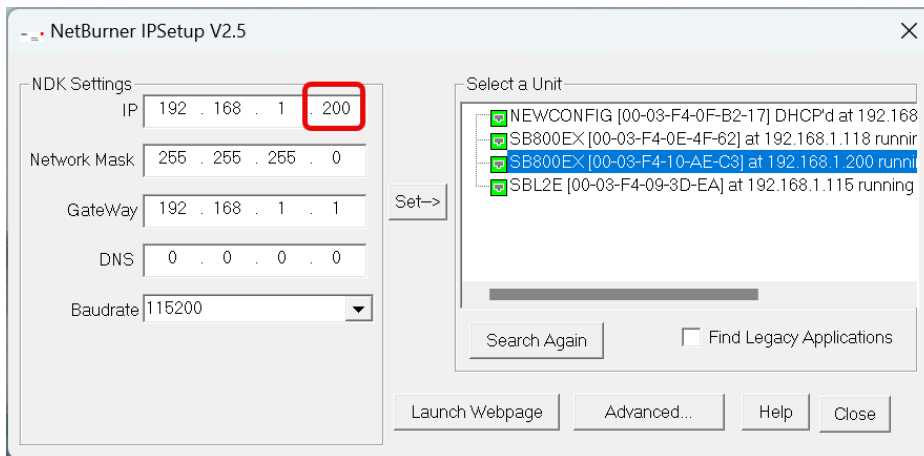Name: IPSetup.exe

Download Link: https://www.netburner.com/download/ip-setup

ipsetup.zip

It is a zip folder. Right click → Extract All.   IPSetup.exe

Copy IPSetup.exe to desktop or your preferred folder.

Connect the DTU to your laptop with a patch CAT5/6 cable.

Run IPSetup.exe. [You may need IT approval to run this tool on a company's computer.]

With direct ethernet cable connection, before you "Launch Webpage", you will need to change your network settings on your laptop.

Depending on your Windows version, this step might be different.

Windows 11

Settings → Network & Internet → Ethernet

IP assignment: Change from "Automatic(DHCP)" to "Manual". Set static IP to:

	To match factory default	To match your company assigned IP *[Example: 10.16.1.112 has been pre-set to DTU.]*
IP	192.168.1.100	10.16.1.100
Mask	255.255.255.0	255.255.255.0
Gateway	192.168.1.1	10.16.1.1

Now, both DTU and Laptop are in the same gateway 192.168.1.1 [or other as you set].

Launch the webpage, you shall be able to access the DTU.

Click on the bar graph, or click on "Unit#1", you will see data for Unit#1.

BatteryDAQ™
Monitoring Solutions

Unit #1 Unit #2 Unit #3 Unit #4
Unit #5 Unit #6 Unit #7 Unit #8

Home | Settings | Help

DTU ID: 13939

Print :: Export :: History :: Float :: Discharge :: LoadTest

Site:name a site here Unit#1:bank name 1 at 1/16/2024, 5:30:11 PM [RTC:1/16/2024,17:29]
[Urgent Alarm]

String_60 cells	**0.0 V**	High/Low	0.0♦0.0 V
Current(avgFloat)	**15.2 A** (15.23)	Ripple	-0.1 A
Avg Cell	**0.001 V**	Max(Min)	0.001 (0.001)
Ambient(Peak)	-40.0°C (-40.0)	Pilot(Max)	-40.0°C (-40.0)

In any case you cannot run IPSetup.exe, after you change your laptop network adapter settings to static IP and correct gateway, you can type IP address to browser: **192.168.1.200**. (As a default test IP.)

Go to the **Settings** page, get familiar with the contents**. Do NOT change anything.**

[1]Address,[2]Wire Mode,[3]Battery Number,[4]Nominal Voltage(x0.1V),[5]Monitor Type,[6]Cycling,[7]Cell T,[

Monitor Type: 10 standalone; 11,12...multiple units for string#1; 21,22,... for string#2

Cycling: 0 - standby; 1 - cycling application

Cell T: 0- disable; xxx address for Temperature Collector

Alarm Type: 0 -disable; 1-Type#1; 2-Type#2; 3-Type#3

Enter Password: [_____] [Update DTU Configuration]

Only authorized person can make changes. Obtain passcode from vendor.

Use passcode "7778" to change date/time only. Click "Update" to send a data packet.

Network Configuration (Restart DTU if IP changed)

Description	Setting	New Setting
IPv4 Address	192.168.1.200	192.168.1.200
Mask	255.255.255.0	255.255.255.0
Gateway	192.168.1.1	192.168.1.1
DNS	0.0.0.0	0.0.0.0
NTP IP	207.244.103.95	207.244.103.95
AutoIP	169.254.149.42	do not change

MAC: 00-03-F4-10-AE-C3
IPv4: 192.168.1.200

[Run: -0d-0.6h-][Free Count: 249 Ping(2)][Total Polls: 0]

Firmware built on Nov 26 2023

Update Firmware [Password Protected]

BatteryDAQ LLC, USA :: Technical Support Email: tech@batterydaq.com :: Copyright Protected

6. Wi-Fi Adapter

It is very convenient to have a travel Wi-Fi adapter for installer.

The following photo shows the connection. The Wi-Fi adapter is powered by Sentry unit 5V on the HMI port. On its back, there is Wi-Fi name SSID and passcode.

Use your phone/iPad to search the Wi-Fi, connect to it.

By default, the Wi-Fi adapter has been set by BatteryDAQ as gateway 192.168.1.1.

If you have set the IP to DTU as 192.168.1.xx, just type into web browser, you shall have access to DTU.

When you're doing the installation, you can use your phone/iPad to check data and progress, instead of going back and forth to your computer or HMI screen.