

The screenshot shows a Windows-style window titled 'BMS Display applet'. It contains a table of battery data with a green vertical progress bar on the right side. The data is as follows:

1	BatID
13.5	Volts
0.0	Amps
0.000	kW
0.9	AH
93	%SOC
85	Temp
00081	Status

BMS Display applet User Guide

Rev. 1.1 ©2016 Lithionics Battery

BMS Display applet is a simple Windows program which receives battery data from Advanced Series NeverDie® BMS equipped with optional Ethernet TCP/IP interface. BMS must be configured to send the data to the IP address of the PC where the applet is running. Data is sent over UDP protocol, so the applet opens a UDP socket and listens for data on preconfigured port number. Default port is 65261 and can be changed using command line options.

System Requirements: BMS Display applet runs on Windows 7 and higher and requires .NET 4.x Framework. The applet may work on Windows XP, but it has not been tested on it. Firewall rules must be set to allow the applet to receive data from the network interface. Typical Windows PC would prompt to allow access thru the Firewall when the applet is launched for the first time.

BMS Display Features:

- Shows all 9 battery data points received from NeverDie® BMS across the TCP/IP network.
- Fuel Gauge data is shown as green vertical progress bar for easy interpretation of remaining battery power.
- Applet stays on top of all other windows, but can be moved or minimized if required.
- Command line options allow multiple instances of the applet on the same PC to receive data from multiple BMS systems, using unique UDP port numbers.
- Data is also saved in a log file in the same folder, which can be used later for plotting graphs and detailed analysis.

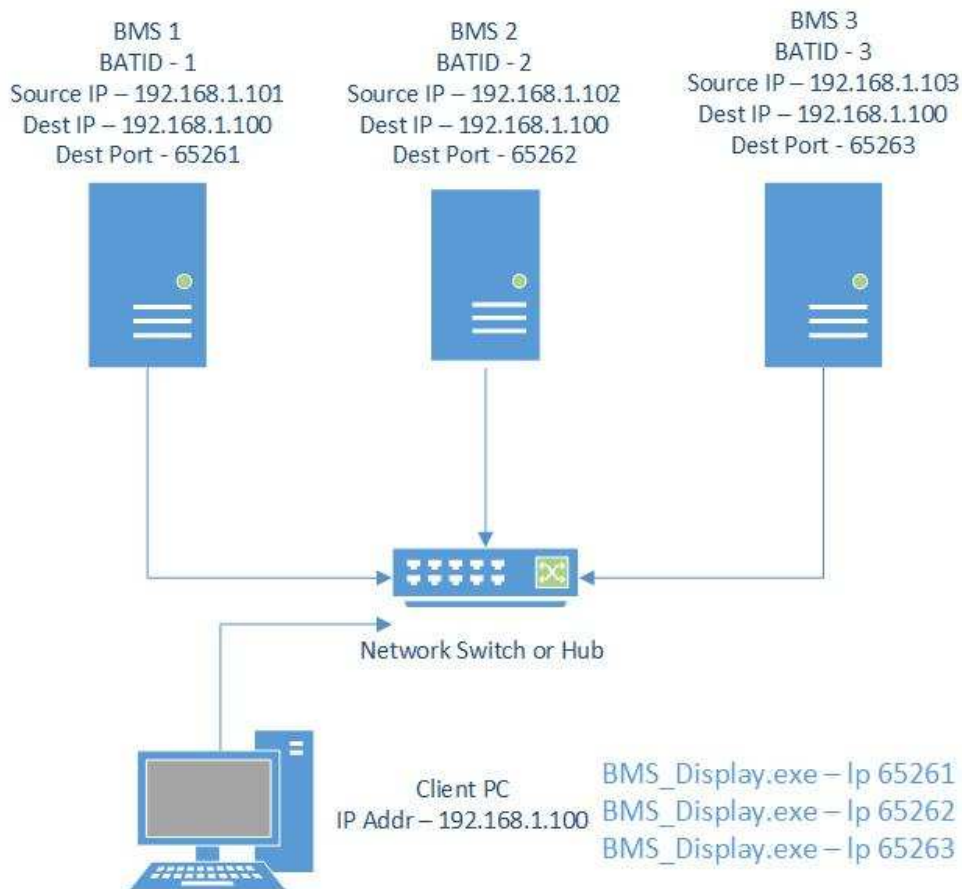
Command Line Options:

- **-lp port_number** Sets non-default local UDP port number, which must match with BMS's Destination Port setting. Only one instance of the applet can be launched for each port on the same PC.
- **-hv** Commands the applet to interpret Voltage data without decimal point, used on high voltage systems.

How to collect BMS data from multiple BMS boxes

By nature of TCP/IP protocols, including UDP protocol used by NeverDie® BMS, only one instance of a port number can be open at any given IP address. So, to allow multiple BMS boxes to send data to a single client PC, each BMS box must be configured with unique destination port. Then multiple instances of BMS Display applet can be executed on a single PC, using corresponding port numbers.

Below diagram shows simple network configuration allowing multiple BMS Display instances running on the same PC. Each BMS box is configured with unique BATID, source IP and destination port, but the same destination IP of the client PC. On client PC multiple instances of BMS Display applet are executed with unique port numbers in the command line.



NOTE: Please refer to Advanced NeverDie® BMS User Guide for details on how to configure BMS parameters.