
Verizon Connect Networkfleet Technical Information Bulletin

Current Draw Measurement

Measuring current draw is a way to determine the average amount of current that Verizon Connect Networkfleet units draw from the vehicle's battery. This is helpful in verifying that units are properly going into sleep mode and performing as expected.

Many times the need to measure the current draw of a Verizon Connect Networkfleet unit arises after a vehicle's battery drains out, resulting in the need to jumpstart the vehicle. Since this is often an indication of a dying battery, it is best to first verify that the battery is in good working condition. Next, it may be useful to check if other devices in the vehicle are contributing to the battery drain.

In order to properly measure the current draw in a vehicle installed with a Verizon Connect Networkfleet unit, you need to verify that the unit has fully initialized (i.e. unit is plugged in and working properly) and has gone into sleep mode. If the unit has not fully initialized, the resulting readings/measurements may show higher values than what the unit is really drawing when in sleep mode. It is important to note that even when the unit is in sleep mode, you will see spikes in the current. Because of this, you will want to be sure to measure the **average or Root Mean Square (RMS)** current draw over a period of time when the unit is in sleep mode. Before performing the steps listed below, make sure that your meter is set for **average or RMS** current measurement (not maximum or minimum readings).

Steps to Measure Current Draw

1. Before taking the unit's measurement, make sure to use a unit that has been verified as operational and that is reporting vehicle information.
2. Connect the multimeter in series with the battery and plug in the Verizon Connect Networkfleet device. Do not start measuring current draw at this point.
3. Wait for five (5) minutes for the unit to initialize; making sure the red LED is off. At this point you can begin to measure current draw.
4. Measure the **average or RMS** current draw for a period of time (a few minutes or as long as you can). Again, please note that you may see spikes of higher current draw; however these high spikes occur on occasion (not all of the time).

Current Draw Averages for Verizon Connect Networkfleet Hardware Units

In sleep mode, Verizon Connect Networkfleet hardware units have the following current draw:

- **3400 Product Line** – 30 mA @ 12V (Units configured for Hybrid vehicle operation may draw 10mA more)
- **3500 Product Line** – 21 mA @ 12V (Units configured for Hybrid vehicle operation may draw 10mA more)
- **4200 Product Line** – 13 mA (typ) @ 12V
- **5000 Series** – 16 mA @ 12V (5500 Light, 5200); 30 mA @ 24V (5500 Heavy)



For questions or more information, contact your Customer Success Manager or email sdcustomersuccess@verizonconnect.com

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