Power Grid Software Guide

The following describes software needed for Power Grid operation.

Power Grid models. These models are based on Arduino Nano with the ATMEGA 328P processor. They can be addressed and programmed with the Arduino IDE. When addressing these models, choose

- Board: Arduino Nano
- Processor: ATmega328P (Old Bootloader)
- Programmer: Arduino ISP

The Arduino boards used in the Power Grid models use the CH340 based serial communications chip and require a CH340 serial driver. Installation details and driver download links can be found at the following link:

https://learn.sparkfun.com/tutorials/how-to-install-ch340-drivers/all

LabVIEW Application Software. The LabVIEW application for the Power Grid is written in the **LabVIEW Community Edition version 20.0.1 (32 bit).** This is the free community version of LabVIEW and not intended for commercial or academic use. If at a university, use the appropriate academic license for your institution. The community edition can be downloaded at:

https://www.ni.com/en-us/support/downloads/so/wareproducts/download.labview.html#460283

Alternatively, use LabVIEW in its evaluation mode. Again, use **LabVIEW 2020 SP1 32 bit.** This can be downloaded at:

https://www.ni.com/en-us/support/downloads/software-products/download.labview.html#477380

NI VISA Driver. This application program requires the NI VISA driver. That driver can be found and downloaded from the following link:

https://www.ni.com/en-us/support/downloads/drivers/download.ni-visa.html#480875

Use **NI VISA 20.0**