

UPS Monitor Plugin for XTension

version 1.0 7/10/08

The UPS Monitor Plugin provides units in XTension that correspond to the state of an attached OSX supported UPS device. The parameters currently supported are:

- Presence of AC Power
- Current battery capacity
- Maximum battery capacity (starts at 100%, drops as battery ages)
- Time To Empty in minutes
- Time To Full Charge in minutes
- Is Charging

UPS Monitor is included in the 6.0 version of XTension in demo mode and can be unlocked by purchasing a serial number for \$10 usd from:

http://sentman.com/UPS_Monitor.html

After receiving your serial number you can unlock the demo by selecting "Enter Plugin Serial Numbers" from the File menu.

To setup the UPS Monitor in XTension open the program preferences and switch to the communications tab. Click the "New Device" button. Select "ups" from the "Device" popup and give the interface a name. The port setting will default to USB.

Create the units in the XTension database that correspond to the properties listed above. All units should be assigned to the interface you created in the first step and will have addresses numbered from A1 to A6. If you have more than one UPS connected the next one found will use the B house code and the third the C house code and so forth.

AC Power

Address: A1
not dimmable

Capacity

Address: A2
dimmable
Unit Of Measure "%"

Max Capacity

Address: A3
dimmable
Unit Of Measure "%"

Time To Empty

Address: A4
dimmable
Unit Of Measure "minutes"

Time To Full Charge

Address: A5
dimmable
Unit Of Measure "minutes"

Is Charging

Address: A6
not dimmable

After creating the units return to the preferences window and turn on the new interface you created and the units will update with new values.

The 2 most useful fields will be the AC Power and the Time To Empty. Given the state of those 2 units you can figure out if you're running on battery power and how long you've got left (approximately) Though the powerline interfaces connected to XTension try to report power outages, they may miss short ones, and may take quite a while to report it.

The time to empty value may be updated while the power is on, it may say 0 or -1 depending on the UPS being used so before you take action on a new value check the status of the AC Power unit to make sure the power is actually off before doing something on just any change.

You may wish to report the time left via speech, or you may wish to send an email when your power goes out, and another one just before the machine shuts down. I also perform a database save at 5 minutes left so that when the machine gets unplugged at the end of the battery I don't run the risk of losing any settings.

General UPS usage: OSX treats a UPS the same way that it treats a MacBook battery and it gives you the option of cleanly shutting the computer down when the UPS battery is depleted. However, with something like home automation you want the computer to restart when the power is restored. The problem here is that the option "restart after power failure" only works if the machine power is cut off, not if the UPS software does a clean shutdown. So you'll probably want to turn off the nice shutdown and let the UPS just shut off. That way when power is restored the machine will restart. This feels wrong, and there is a remote chance of some data corruption but there doesn't appear to be any other way to guarantee that the machine powers itself back up after a long term power failure.

You should create only 1 instance of a UPS Monitor device in XTension. If you have more than 1 UPS attached they will show up on further house codes, not separate interfaces.