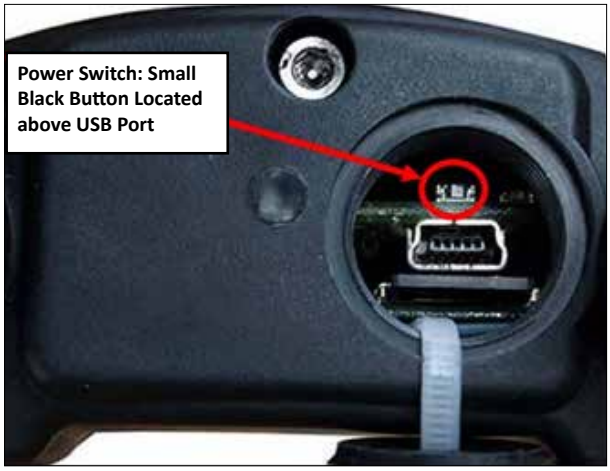
Powering PSY1 From USB Port



Picture above: the PSY1 can also be automatically powered up by connecting it to a power supply. This can either be in the form of a Mains to 24 volt DC power supply, a solar panel, USB connection or external 12V battery. (See Charging - Powering the Instrument in the PSY1 manual).

Customer asks:

Could you tell me more about the power requirements of the PSY1 for connecting several PSY1 on the same laptop with a USB multi port; i.e. whether this USB multi-port needs any specification for enabling 5-8 PSY1's to be connected?

ICT answer:

With regards to the power requirements, the PSY1 has a dynamic power circuit that can draw between 10 mA to 200 mA which is a very low current draw. This is because the instrument runs off an internal battery. Therefore, the power draw is just to trickle charge the internal battery which from a 5V USB port will be approx. 60 mA. This is coincidentally the same draw on the battery of the communications to interface with the software.

Yes you can use a 4 or 5 or even 8 port USB Multi Port to connect multiple PSY1's without problem. You should of course have your laptop powered by an external supply but if it has a good fresh battery and you are not using it for long you could just operate the laptop off its own battery. But be warned if the laptop goes to sleep it will invariably play havoc with the coms ports and you will loose data and have to reset the laptop to reopen the coms ports and establish communications again. You can also run multiple instances of CIS software when using a USB multipart hub. Just please be sure to annotate all instruments clearly in the description and comments section. If you don't make mistakes about which instrument you are interfacing to.

You can use the USB port to charge the instrument as well for short period of time (must be unplugged after 8-9 hours), however it is not recommended charge the PSY1 meter this way because the battery will get damaged soon; in fact the USB port is mainly meant to be used for data transfer. A 110 to 240 V battery with a timer would be recommended to the instrument for 12 hours and resting for the following 12 hours each day.