

# UMon – USB Monitor PC Interface



- Interfaces with SiMon and SiCan (PacMon extensions).
- Translates PC USB interface to the Batrium network.
- Used in setup and real-time monitoring only.
- Includes red LED for diagnostics.
- Compact in-line cable design to fit anywhere.
- Uses common “USB” type interconnect cables.
- Includes safety chassis ground.
- Sealed in robust plastic.



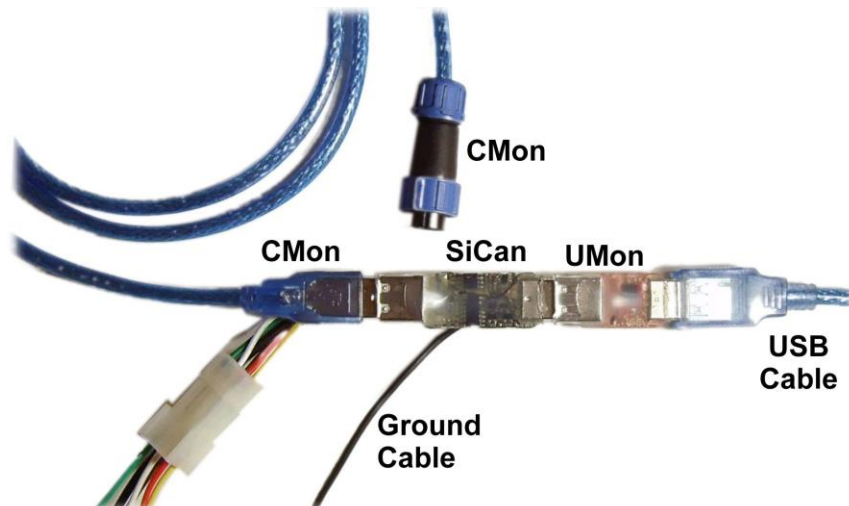
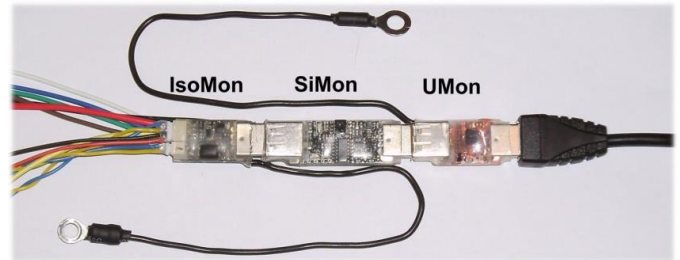
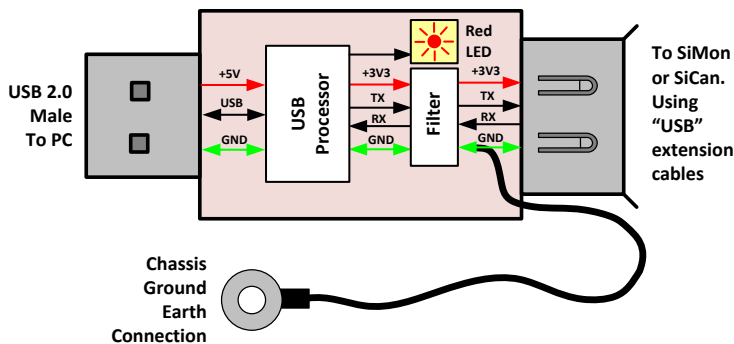
UMon is a compact low cost USB interface to SiMon and SiCan. It allows PC (or Tablet) monitoring of additional extension batteries and extension chargers in Battery Angel™ networks provided by Batrium.

It is robustly packaged in plastic insulation in an “in-line” fashion. It has an earth strap that keeps catastrophic fault currents local for minimal damage. UMon uses a convenient opposite gender (male &

female) “USB” cable interface for connecting to the rest of the networked items.

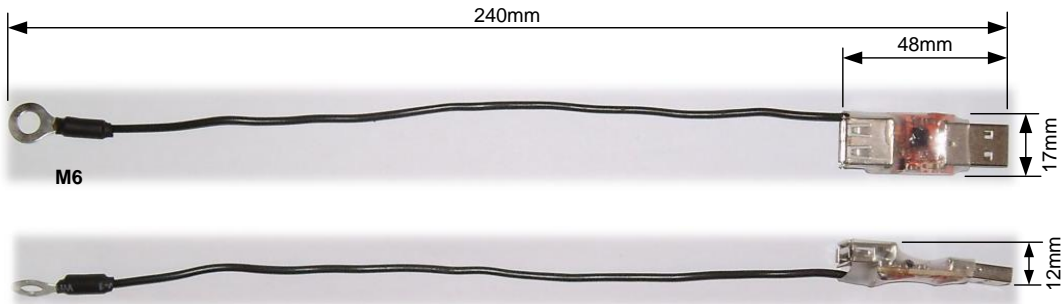
It is possible to add up to 5 metres of common USB type “A” (male to female) extension cables between devices. It is powered through the USB connections.

It has a red LED that is “ON” when the USB is enabled for instant diagnostics and status.



**Specifications**

Parameter	Min	Typical	Max	Unit	Notes
Normal output voltage		3.3		V	All devices on the Batrium network have 3.3V cable connections.
“USB” extension cable length	0		5	m	Male to female USB type “A” cable length. See notes on USB extension cables.



**UMon Dimensions**

**Ground Connection**

The chassis ground “ring” terminal on the UMon should be secured to a ground (0V) reference M6 bolt. This provides both single fault protection and added electrical noise (and transient) isolation. It provides protection and filtering for the PC in transient conditions and operator protection from high battery voltages. Do not extend this black cable unless absolutely necessary.

**UMon Red LED (USB Driver)**

The red LED is normally ON when connected to a USB port (PacMon or PC) and the correct driver has been located. Should the driver not automatically install, it is available in the “Support” menu for new software versions. It is available from the “Start => All Programs => Batrium” location for older software versions.

The USB drivers support both 32 bit and 64 bit windows operating systems. It uses the “SiLabs USBExpress” driver. It is important to establish the red UMon LED is “ON” before proceeding into software commission steps.

The UMon needs to be paired with the appropriate SiMon or SiCan software channel. This is normally done via the automated software wizards; however it may be necessary to manually pair them using the “Advanced Setup UMon Hub” page in the new software. Older software uses the “Commissioning Find Port (UMon)” page.

### USB Type Extension Cables

Devices in the Batrium system are interconnected using common “USB” male to female Type-A extension cables. The use of an extension cable is optional; the devices can also be connected directly in-line without a cable. Directly connected devices should have additional binding for strength.

Note the following points when choosing a USB cable:

- Use shielded cables that are USB type 2.0 rating.
- Use passive type “A” extension cables. Do not use cables with electronics included – usually identified with a large female connector housing the electronics.
- Use cables with outer plastic shielding on the female end. If not, at least add heat shrink to minimise external metal exposure.

USB extension cables are available from Batrium.

### USB Hub

Use a USB Hub to minimise connections to the PC. PacMon has two spare USB output ports (internal USB Hub). If an additional USB Hub is required use a self-powered “octopus” device with type “A” connectors, however all USB hubs are suitable.

