

Causes & Fixes For Monitoring Signal Dropouts & Spikes

Occasionally over the last few years we have seen a couple or so clients suffer from signal dropouts and spikes, especially when sending data to an online portal. In all cases we have sent replacement hardware, only to find the monitoring hardware was not the issue.

So here is a list of known causes and fixes, for signal dropouts and spikes.

1. When using the bridge, the white power supply MUST be plugged into the bridge and not the monitor. The white power supply is 5 volts, the black is 3 volts. Damage could occur here!
2. The black power supply is NOT to be used at all, when the monitoring system is using the bridge. This black power supply is still useful for adding another monitor though, to a different location in your home. Contact us for more information.
3. To be on the safe side, make sure the transmitters are not sited next to the fan on the inverter, where EMF may interfere with the transmitters signal. All sources of EMF should be avoided.
4. Where the transmitter is sited in a metal powerbox the signal range from the transmitter to the monitor is around 30 meters. Signal loss may occur if there is excessive building materials between the two. Positioning the two devices closer will fix this or adding a waterproof box to the transmitter, thus the transmitter is now outside of the metal cabinet. See this blogpost [WATER PROOFING YOUR TRANSMITTER](#) for all the details.
5. Other devices such as wireless routers, cordless phones can in some cases also interfere with the transmitters signal. So making sure the transmitter or the monitor is not next to one of these devices is good practise.

Dropouts On The Monitor's Screen

A loss of signal between the transmitter and the monitor will be seen as dashes on the screen of the monitor. This is a distance issue between the transmitter and monitor, or signal interference.

Dropouts Seen Online

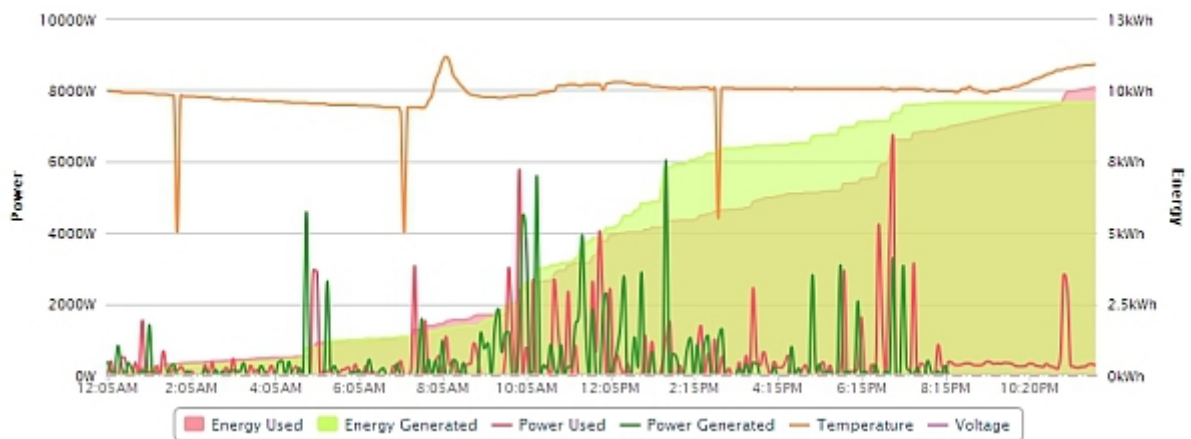
Usually dropouts online but not on the monitor screen itself are caused by the incorrect power supply being used for the bridge or the monitor. Often with this issue, there are spikes and downward drops in the temperature readings seen

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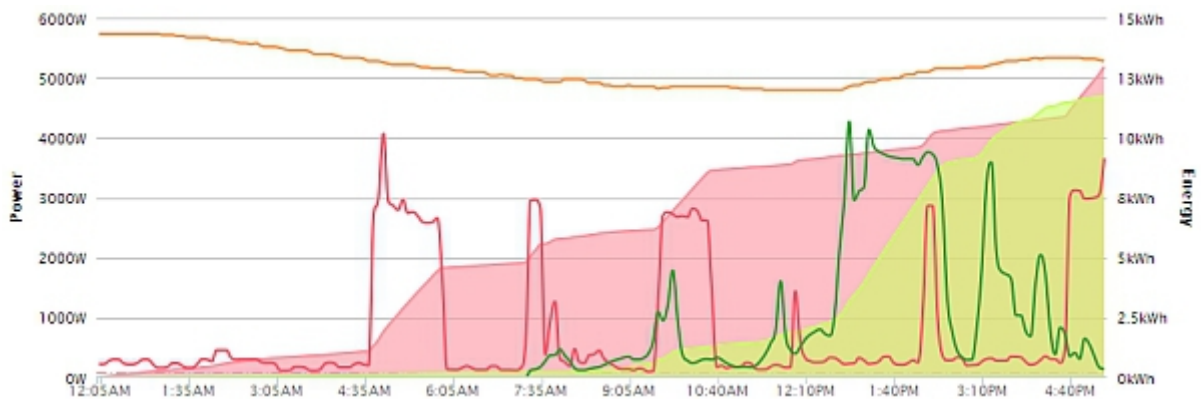
on the online portal.

The next cause of signal dropouts and spikes is due to the type of modem or router being used.

Symptoms Of Non-Compatible Modems / Routers

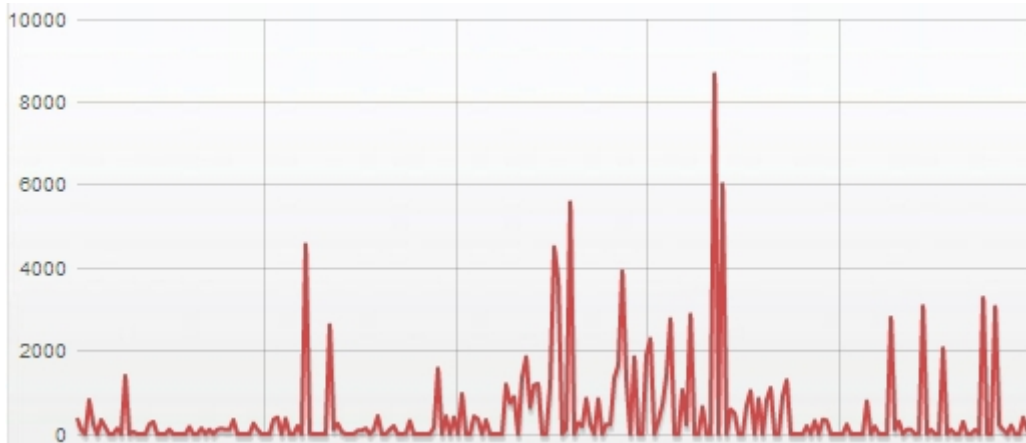


PVO Portal - Meaningless Data With Spikes & Temperature Dropouts



PVO Portal - Clear Consumption & Solar Power Data

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CC Portal - Meaningless Solar Power Data With Spikes



CC – Portal – Clearly Showing Solar Power Data

Our list of known non-compatible and compatible modems / routers is based on our client's feedback and also feedback from the manufacturer of the bridge, gained during their initial testing and development.

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List Of Known Non-Compatible Modems / Routers

This is the international listing.

Belkin N300
Belkin N150 Mod f9k1001v1
Comtrend CT-5072T
Netgear RP614 v3
Belkin N600DB Model F9K1102 v1
Linksys BEFVP41 v2

This is the client listing.

Belkin F5D8636-4
Belkin 7994

List Of Compatible Modems / Routers

This list has been created by asking our clients for information on what they have installed and operating successfully.

Dynalink ETA132E
Cisco / Linksys WAG320N
Apple Mac Airport Extreme
Netgear n600 Wireless Router
Netgear DGND3700
Billion BIPAC 7402X

Awaiting client feedback April 2015

If you wish to add your hardware to the list please do so via email.