

Winter power problems: Don't get caught cold



With data centre downtime on the rise, **Leo Craig** of Riello UPS offers a timely reminder why UPS maintenance is an operator's ultimate insurance against blackouts this winter (and beyond).



The Uptime Institute's latest annual snapshot of the data centre world highlights a troubling trend. Nearly a third (31%) of data centres experienced a serious IT downtime incident in the past year, up from 25% in 2017.

Perhaps more concerning is the admission from 80% of data centre managers that their most recent outage was actually preventable. Is this due to complacency – an 'it'll never happen to me' attitude? A lack of training? Cutting corners to reduce costs?

Whatever the reasons, it's a worrying state of play as we head into winter, which itself poses its own unique challenges. Colder temperatures lead to greater demand for electricity with less renewable generation feeding into the National Grid. Snow, ice, and chilling winds can knock out power lines and there's a heightened risk of flooding. All-in-all it's the time of year where power problems are more likely to happen.

Such disruption costs a data centre thousands of pounds a minute, so the stakes are high and resilience a must. A reliable uninterruptible power supply (UPS) is a key weapon in any data centre operator's fight against downtime.

But there's no guarantee a UPS will never fail. In its own right, an uninterruptible power supply is an intricate electrical device with parts that will need replacing. How you look after it has a direct impact on performance and reliability.

That's why you simply can't afford to overlook the importance of a robust preventive UPS maintenance regime.

Prevention is far better than cure, and a hands-on approach to preserving your power protection equipment not only makes it less likely you'll be hit by blackouts, it also allows your system to run at peak performance and efficiency.

In addition, proactive UPS maintenance has been proven to increase the lifespan of some key components by 25-50%.

What should a UPS maintenance contract include?

Dedicated maintenance plans offer a more superior coverage than a standard warranty and give your data centre priority access to trusted technical experts.

Probably the most important point to

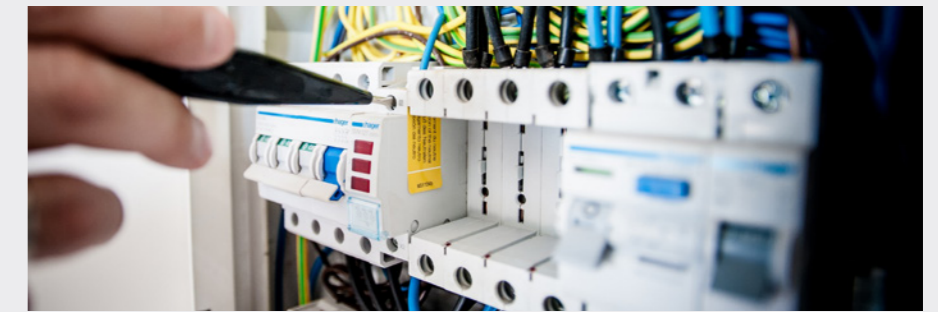
consider is what happens in the worst-case scenario where there's a fault with your UPS system – what emergency response do you get? Time is money when a data centre is concerned, so you should seek the speediest possible service.

In addition, the availability of spare parts should be spelled out. Components such as capacitors and batteries have a certain shelf-life and will eventually need replacing. Depending on the service level agreement, parts and labour may – or may not – be included in the contract.

A solid UPS maintenance and service plan should also include a minimum of one Preventive Maintenance Visit (PMV) a year.



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Think of your PMV as an essential 'health check' for your UPS. Engineers carry out a meticulous inspection of your unit, install the latest software updates, and identify any parts that might need replacing. It provides that extra peace of mind your system is running at optimum efficiency.

Do your due diligence

Unfortunately, not all UPS maintenance contracts are made equal. Some are better than others. And sadly some agreements aren't even worth the paper they're written on, full of get-out clauses and caveats.

That's why before you sign on the dotted line you should quiz any potential provider to be completely sure you'll get the quality service you deserve.

Here are a few key questions to ask:

My UPS is under warranty, do I even need a maintenance contract?

Although most new UPS systems will be covered by a one, two or even three-year warranty, that doesn't mean you should opt out of a comprehensive UPS maintenance plan.

Warranties only offer a best endeavour response. When an emergency strikes, you could be left waiting days to get your system back online. A maintenance plan spells out guaranteed emergency response times to get you back up and running as soon as possible.

How fast will you respond to an emergency?

Of course, you can't predict when a UPS system will fail. Data centres need to know they've got support 24/7/365. They also need clarity

that their issue will be fixed fast.

Many providers supposedly offer a 24-7 emergency response, but what does that actually mean in practice? What is the 'response'? Is it an automated message saying your problem has been noted? A phone-call with technical support? Or an engineer on-site fixing the problem within a set timeframe?

With some maintenance providers, you'll get a rapid initial response, but it might be days before your faulty UPS gets back online.

Most suppliers offer response times ranging from 12 working hours down to 4 clock hours. But because of the lack of clarity found in many UPS maintenance contracts, Riello UPS has gone one step further. With our Diamond plan, not only do we commit to a 4 clock hour emergency response, we guarantee to fix the problem inside a further 8 hours – ultimate protection mission-critical sites like data centres can rely on.

Who'll be servicing my UPS?

An uninterruptible power supply is an extremely complicated piece of equipment. It goes without saying the engineers you trust to install, service, and repair your UPS must know what they're doing.

Ask the supplier whether their field engineers are fully-trained and certified. This is particularly important if you're thinking of opting for a third-party maintenance provider, rather than the actual UPS manufacturer. Are you sure they have the competence to work on your particular model?

For added peace of mind, all Riello UPS engineers – whether in-house or from au-

thorised service partners – must successfully complete our challenging Certified Engineer training programme.

How quickly can I get spare parts?

If your UPS system's offline, every second counts. So while it's obviously important that your maintenance provider has significant stocks of spare parts, it's little consolation if they're hundreds of miles away from your site.

Perhaps the question shouldn't be 'what have you got?', it should be 'where have you got it?'. Unlike many manufacturers, Riello UPS stores replacement parts not only at our headquarters but at several sites throughout the UK. This means spares or even replacement UPS units can be on-site the very same day, often within a few hours of a fault first being reported.

While we're talking spares, it's also worth clarifying what's covered under the maintenance plan and what isn't. Consumables like batteries and capacitors don't tend to be included.

Replacement fans are included as standard with Riello UPS maintenance contracts, but this isn't always the case so make sure you don't get stung with unexpected charges.

Summary

When even the most cautious estimates suggest IT downtime costs data centres a minimum of £5,000 per minute, it's surely common sense to see that a dependable UPS system and ongoing maintenance contract will end up paying for itself over time. Data centre operators that overlook these unquestionable benefits are likely to catch a cold when the big winter freeze strikes. ❄️