Power Availability vs Energy Performance

The proper Electrical Infrastructure to find the Best Compromises

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In summary

"An electrical equipment engineering and manufacturing company, specialising in low voltage energy performance"

99 years	**3 600** employees	**12** production sites
544 M€ turnover	**10%** of turnover in R&D	**28** subsidiaries

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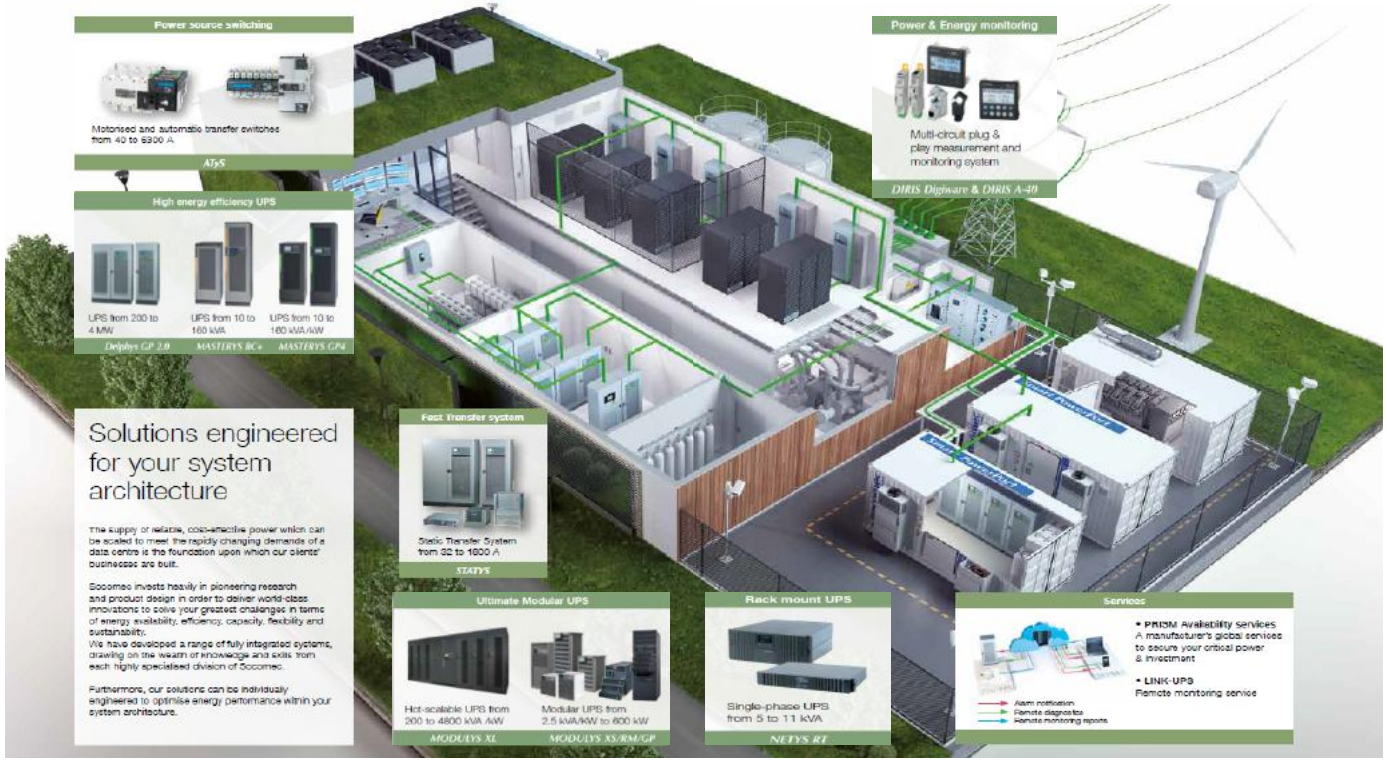
Our solutions for Data Centre



The challenges we face together

No Downtime Costs

Reducing Operational Cost

Optimised Project Design Costs

Optimised Maintenance

Reducing carbon footprint

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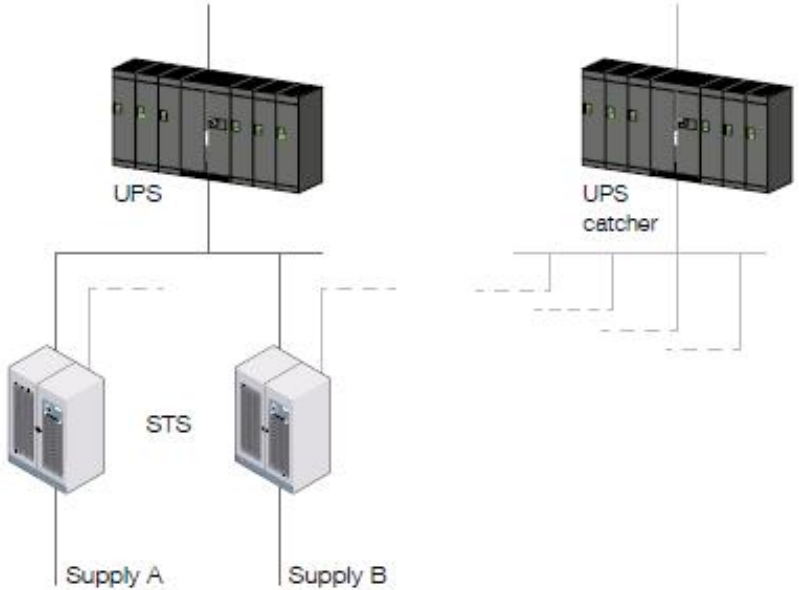
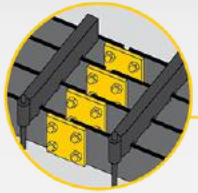
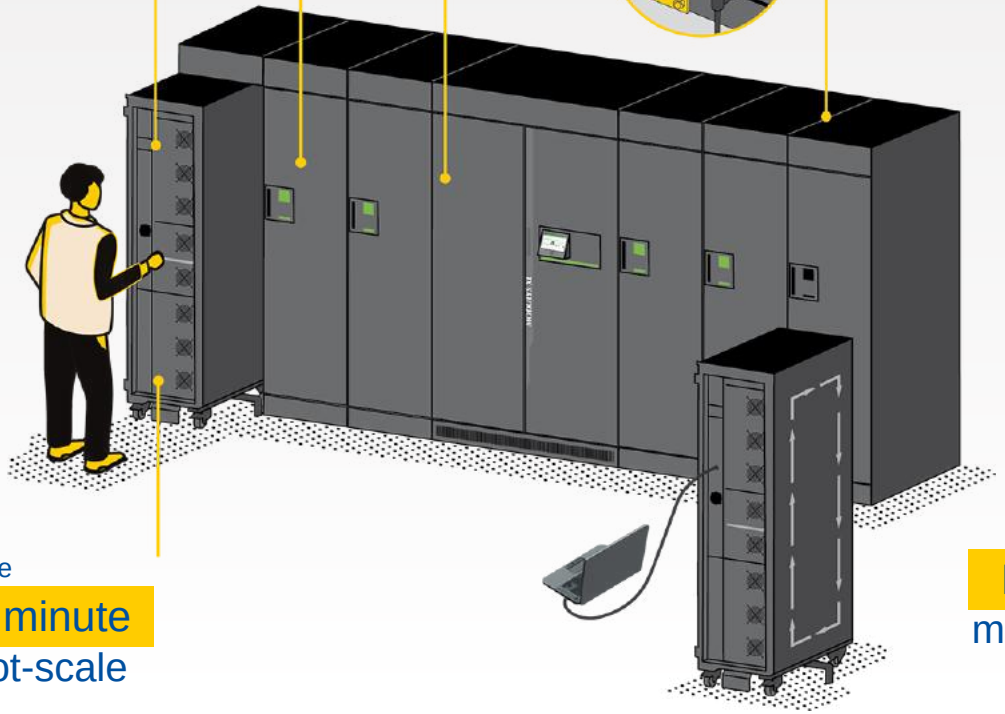
Electrical Infrastructure



3 standard bricks
to design your very own system



Safe and easy
deployment



The
5 minute
hot-scale

Risk-free
maintenance

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3 standard bricks

to design your very own system

Configured for today – ready for tomorrow

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3 standard bricks - to build your own modular UPS

Power hub

Power connection area
Local and remote user interfaces
Full rated centralized bypass

Power slot

Pre-connected bay
Ready for power module hot plug-in

Power module

Complete 200kW module
Hot-pluggable into Power slots

The 5 minute hot-scale

Fast and safe hot-scalable, without risks

Easy plug-in
200kW - 1 Person

- No need of engineering expertise
- Power & control cabling free
- Easy configuration on the display

Fully protected

- Fool proof scalability
- Firmware auto-alignment
- Self-testing and auto configuration

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Risk-free maintenance

Eliminate life management risk

Risk-free maintenance

Low MTTR – online maintenance

Safe intervention

- Critical load remains fully protected
- Zero-risk to affect the running UPS system
- Removal of human error risks

Power Module Maintenance

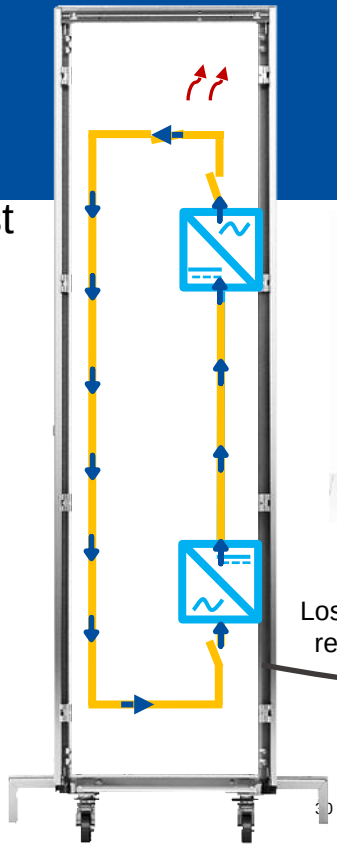
Risk-free maintenance

Low MTTR – online maintenance

Full confidence

- Pre-tests, outside the critical system avioding fault propagations
- Full power (heat-run test) at 200 kW
- No need of a dummy load

200 kW
Heat-run test



Connected to the system
or another dedicated socket

Losses compensation related to efficiency

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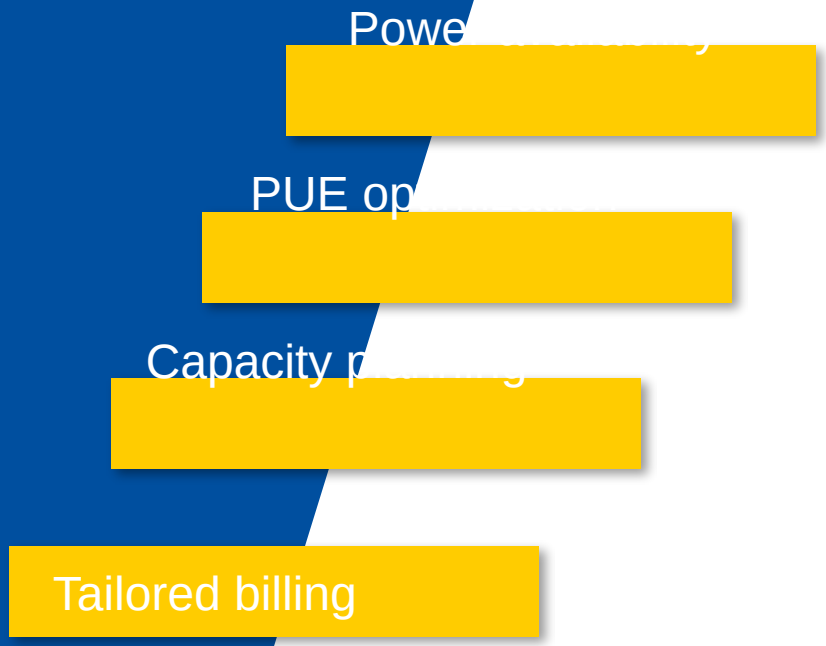
The reasons to use Power Monitoring in Data Centers



Power monitoring in RPP/PDU IT power distribution

1200 x **600** mm.

300 cables to connect

400 x **200** mm.

(24 DIN modules)

6 cables to connect
12 RJ45 cables

60 RJ12 cables

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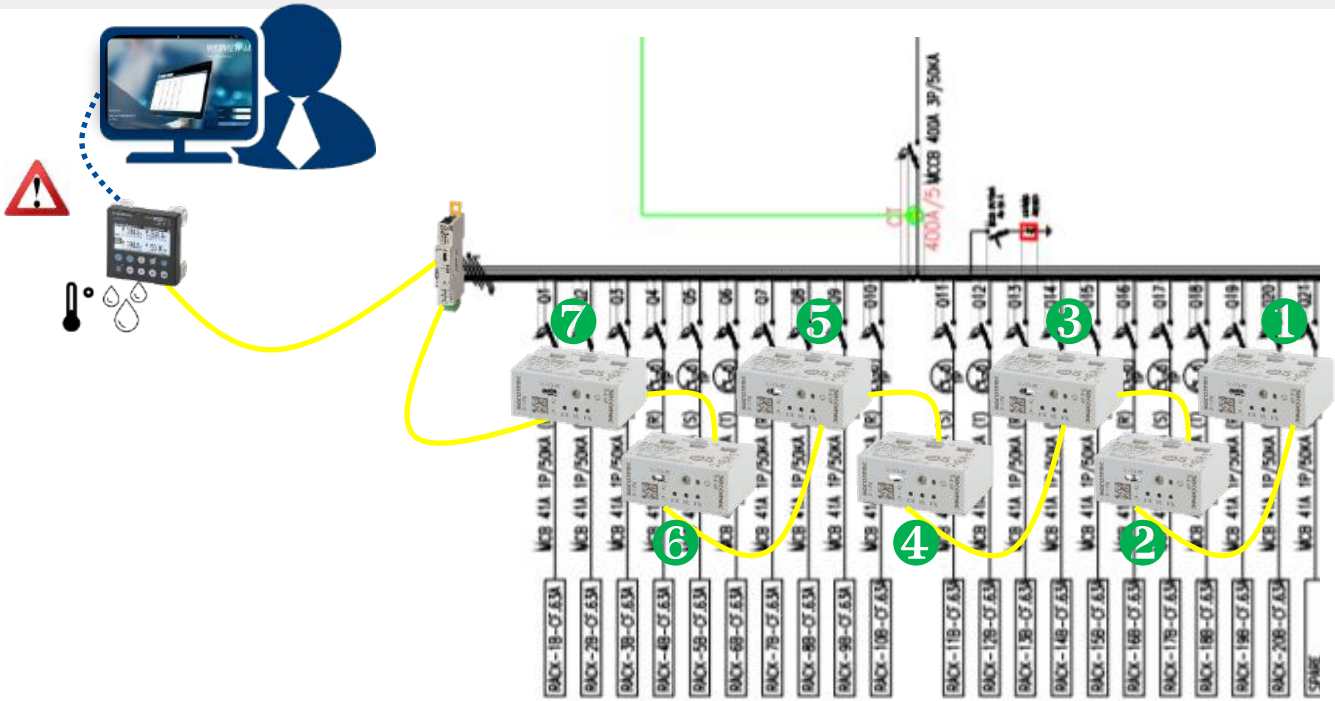
Power monitoring in RPP/PDU IT power distribution



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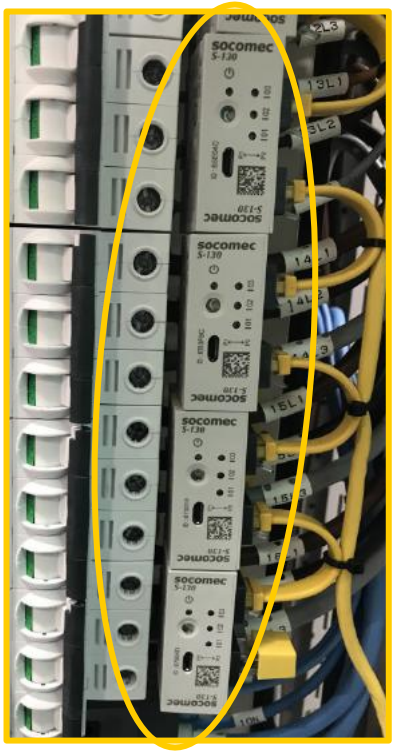
Power monitoring in RPP/PDU IT power distribution



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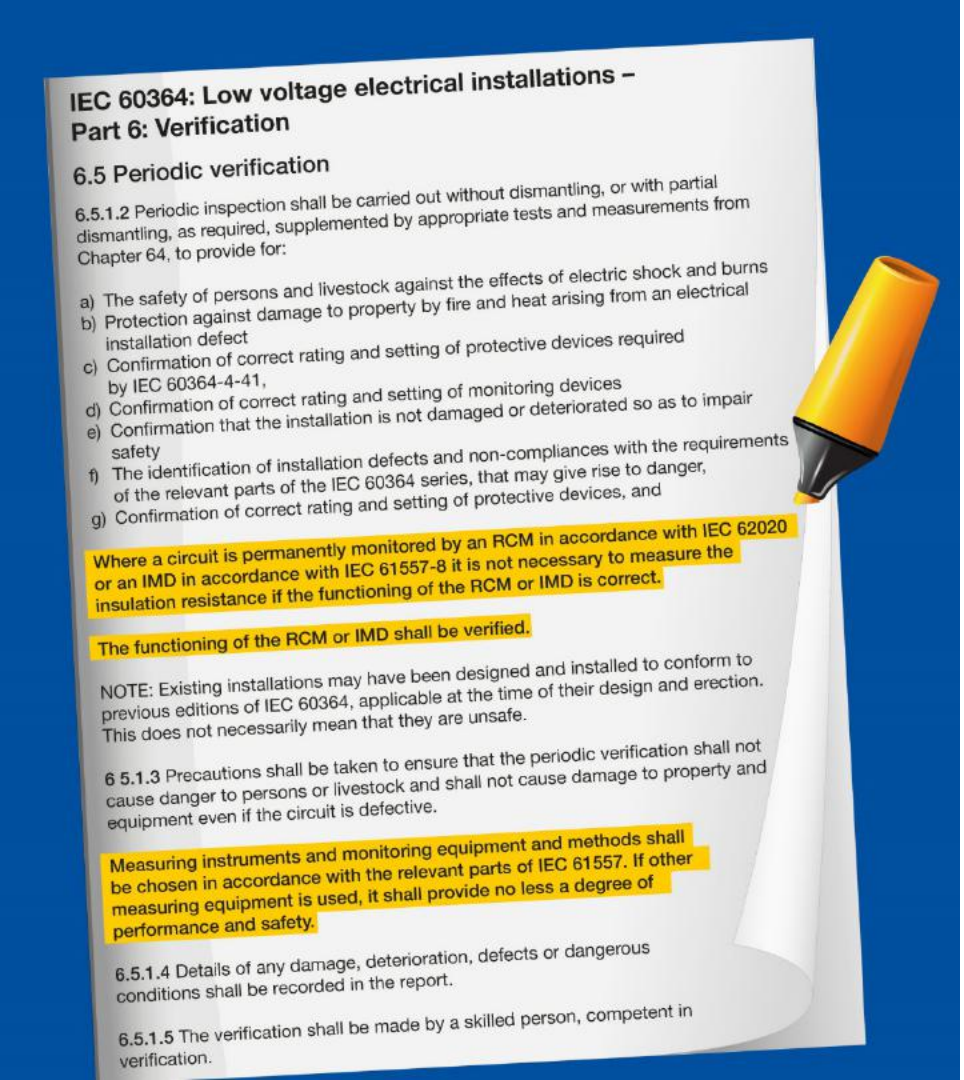
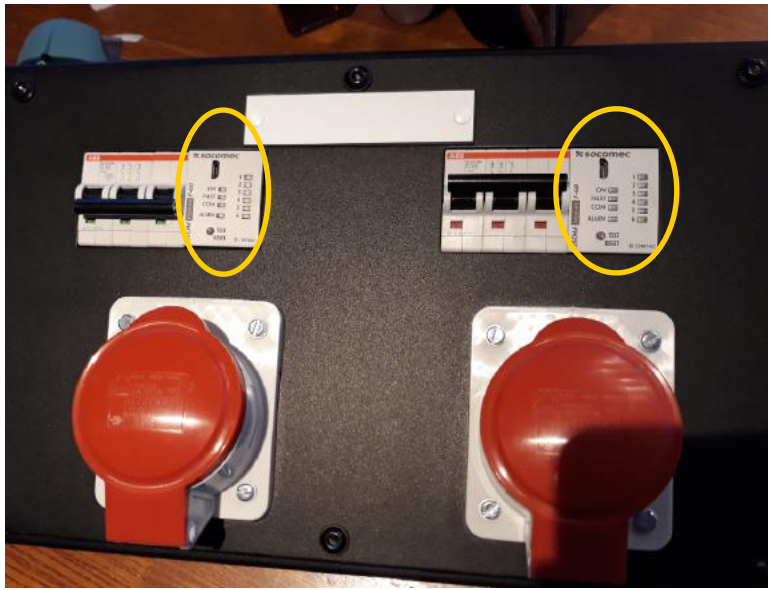
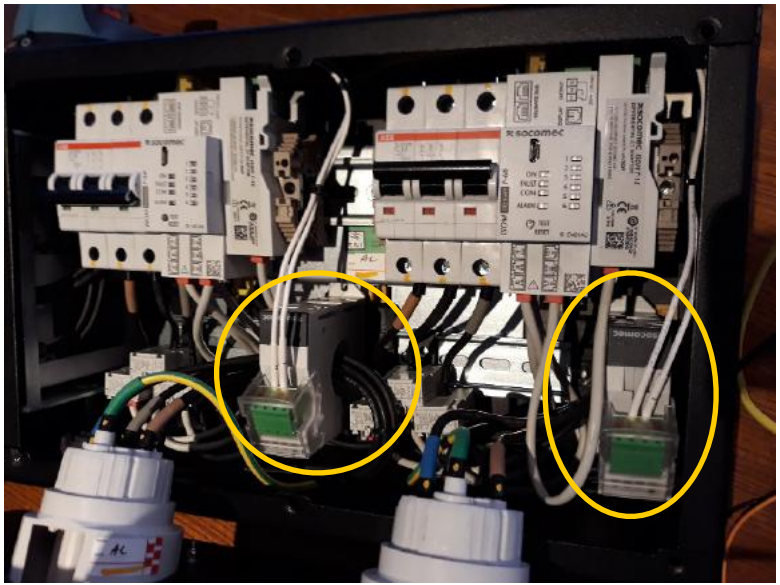


What the installation standard says...

- IEC 60364 / BS 7671-651 calls for a periodic insulation resistance testing on every circuit of the installation
- This periodic testing is a laborious task
  - > It must be carried out by an approved third-party organisation
  - > It is intrusive because it involves opening the main protective device and injecting a voltage of 500 VDC
  - > It can cost tens of thousands of euros depending on the size of the electrical installation
- Testing interval depends on local regulations but is generally every year or every 2 years if the last report did not show any observations
- The periodic insulation resistance testing becomes optional if a permanent IEC 62020-compliant RCM system is installed

Example of RCM integration in a Tap-off box

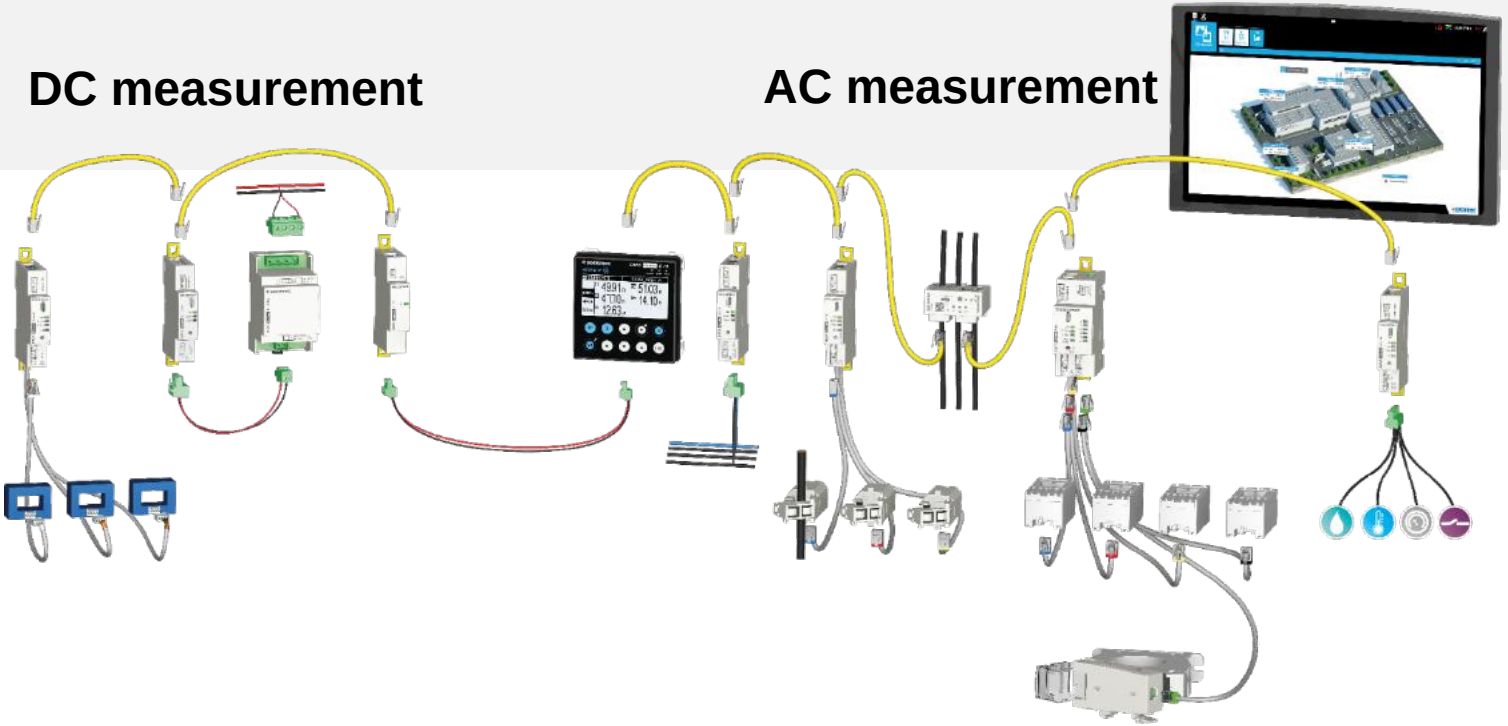




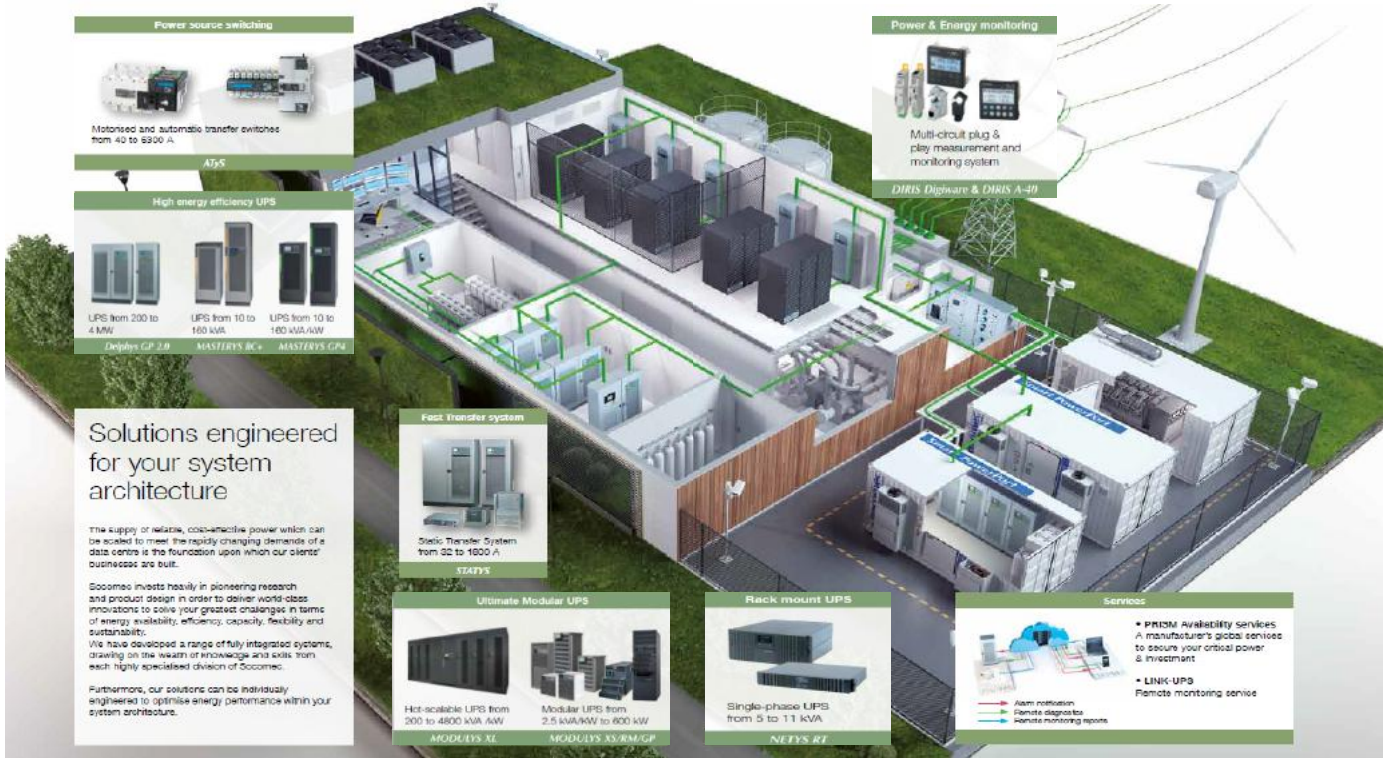
With *DIRIS Digiware*, visualise et analyse your consumptions (AC and DC) within the same system

DC measurement

AC measurement



Our solutions for Data Centre



Speaker

Jérémie PLEYNET – Segment & Specification Dev. Man.

In charge of specification activities since 2008

Focus on critical applications

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thank you SO much!