

# Remote Data Center Management:

Metering, Monitoring, & Management in the New Normal



**Sunbird®**

DCIM that's easy, fast, and complete.

# Table of Contents

- Introduction
- Key Issues Driving the Need for a Remote Management Strategy in the New Normal
- Power Metering with Intelligent Rack PDUs
- Other Power Meter Options and Locations
- What Power Data Should Be Monitored
- Environment Monitoring Options and Locations
- Other Sensors and Intelligent Equipment to Consider
- Data Center Management Software and Remote Management Best Practices
- Remote Data Center Infrastructure Management Toolkit
- Conclusion

# Introduction

The COVID-19 pandemic ushered in a “new normal,” and data center professionals must adapt to keep up with the issues of today while maintaining uptime and business continuity. New challenges include an increased demand on infrastructure with a higher potential for outages, more time pressure on projects, and less staff onsite resulting in a more difficult environment for collaboration, planning new infrastructure and services, and performing changes and maintenance. Data center managers must develop a comprehensive remote data center management strategy to find success.

But how do you know what to do, what tools you need, and what you need to monitor in order to navigate the unique challenges of having to manage your entire data center, colocation, and edge deployment remotely with minimal onsite personnel?

We have had countless conversations with many hundreds of customers in our global user groups for our Data Center Infrastructure Management (DCIM) solution, and we consolidated their feedback on how they are remotely

managing their data centers. They have reported that, with the right tools and strategy in place, it is easy to see and understand exactly what is happening in the data center and enable data-driven decision-making.

If you follow best practices and implement a remote data center management strategy, you will improve uptime, increase data center health and efficiency, and boost productivity.



# Key Issues Driving the Need for a Remote Management Strategy in the New Normal



## Increased work from home and requirements to minimize onsite staff.

Social distancing and restrictions on how many staff members can be onsite are now commonplace. With data center access being extremely limited, management of the data center must be done remotely.



## Increased need for clear instructions for smart hands.

Remote planning and initiation of clear work orders and instructions for remote hands is more important than ever. Data center managers must ensure work activity is done accurately the first time, reducing the need for additional trips to the data center and mitigating the number one cause of downtime: human error.



## Increased complexity and distribution of data centers.

Colocation and edge deployments are on the rise, driving more assets and sites to remote locations. Data center managers need to manage the assets, connections, power, and environment across many locations without the ability to go onsite.



## Increased need for tools to provide automation, data sharing, and collaboration.

To improve productivity and efficiency, data center teams working remotely must break down organizational domains and share a single source of truth via common views of dashboards and reports that are updated and visible in real-time.

# Power Metering with Intelligent Rack PDUs

At the core of your remote data center management strategy are the power meters that provide critical data and insight into the utilization of your power distribution infrastructure to help ensure safe, efficient, and reliable operations. Intelligent rack power distribution units (PDUs) are networked power strips that distribute power within cabinets to IT equipment. Beyond power metering, intelligent rack PDUs can offer other functionality in comparison to their basic counterparts, such as remote power control, environmental sensors, firmware updates, SNMP trap notifications, and electronic cabinet door locks.

There are several types of metering options with intelligent PDUs:

- **Inlet metered.** Metering at the PDU inlet level helps determine power usage and available capacity at the rack, making it easier to provision new equipment, avoid overloading circuits, and calculate Power Usage Effectiveness (PUE).
- **Outlet metered.** Like inlet metering, metering at the PDU outlet level helps determine power usage and available capacity at the rack. Plus, you can understand power consumption down to the device level to identify ghost servers and power hogs, accurately allocate costs to internal or external customers, and compare IT efficiencies.
- **Circuit breaker metered.** Metering at the circuit breaker allows you to know when a circuit breaker is about to trip warning you so you can remediate and maintain uptime.
- **Outlet control.** A switched PDU enables remote power control so you can remotely power on, power off, and power cycle outlets across multiple PDUs from any location.



Get the full eBook by clicking the link below.



Download My Free eBook 