

EBOOK

# Top 10 Reasons to Monitor Busway Tap Boxes



**Sunbird**<sup>®</sup>  
DCIM that's easy, fast, and complete.

# Table of Contents

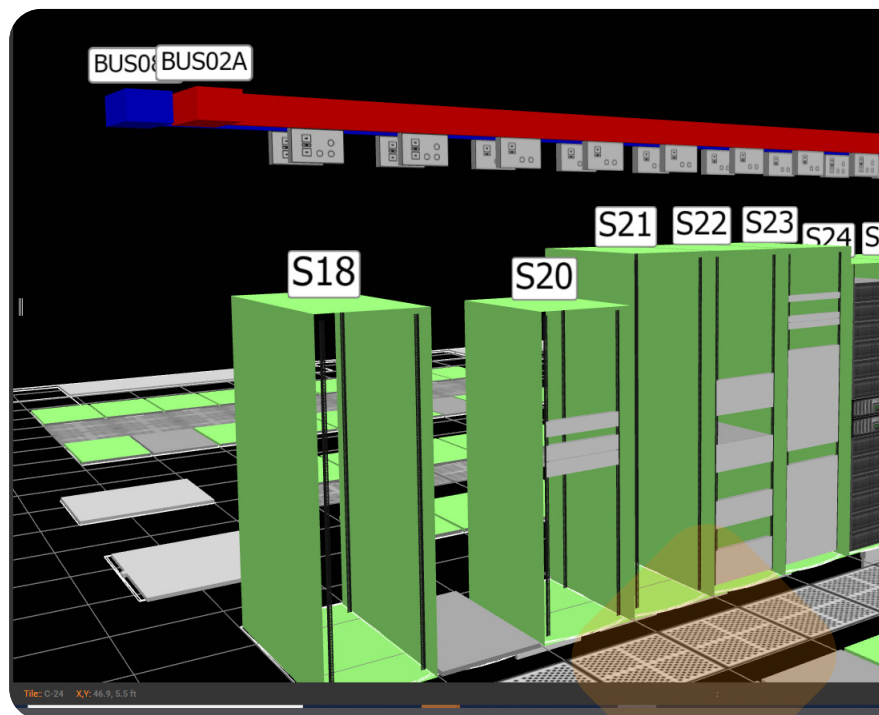
<b>Introduction</b>	<b>3</b>
<b>How Monitoring Busway Tap Boxes Maintains Uptime</b>	
1. Monitor actual cabinet power load and receive warning and critical alerts based upon threshold violations.	5
2. Monitor actual rack PDU inlet current to ensure loads do not exceed redundancy thresholds.	6
3. Monitor actual loads at every breaker point in the power path including panels and UPSs to ensure breaker ratings are not exceeded.	7
<b>How Monitoring Busway Tap Boxes Improves Efficiency of Capacity Utilization</b>	
4. Manage cabinet level stranded power capacity.	9
5. Understand three-phase load balancing and how to balance.	10
6. Monitor and fully utilize breaker and panel power capacity.	11
7. Measure and trend your Power Usage Effectiveness (PUE).	12
<b>How Monitoring Busway Tap Boxes Increases Productivity of People</b>	
8. Automatically collect and store power readings.	14
9. Reports and trend charts available via web browser.	15
10. Management reports made easy with over 100 out of the box dashboard charts.	16
<b>Conclusion</b>	<b>17</b>

# Introduction

Modern data centers are growing in density and complexity as IT devices require more and more power to racks. This can lead to issues with power distribution, cabling, and cooling, and challenges data center managers to keep pace with the ever-increasing demands of IT infrastructure.

To stay ahead of the rising power requirements for critical infrastructure in racks while reducing complexity, many data center managers deploy overhead busways for their power distribution architecture. The benefits of busways can be found in increased space capacity, flexibility, energy efficiency, scalability, modularity, reliability, customizability, and safety. Busways also reduce construction costs, construction time, maintenance time, and human error.

Yet, without a monitoring solution, you may not be getting the most out of your busways. That is why the best data center managers leverage Data Center Infrastructure Management (DCIM) software to centrally monitor all their tap boxes.



## Monitoring busways with DCIM software makes it easy to:

- Maintain uptime.
- Improve the efficiency of capacity utilization.
- Increase the productivity of people.

From hundreds of discussions with our customers, we have first-hand knowledge on how and why they use DCIM software to monitor their busway tap boxes. In this eBook, we have compiled their feedback into the top 10 reasons why you should monitor your busways.

# How Monitoring Busway Tap Boxes Maintains Uptime

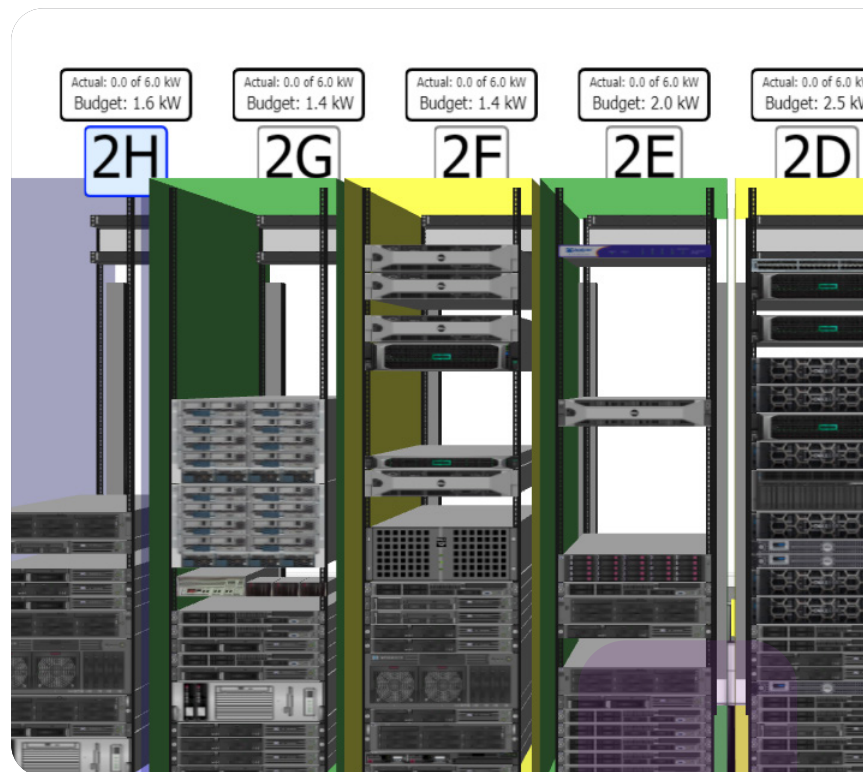


# Monitor actual cabinet power load and receive warning and critical alerts based upon threshold violations.

Many data center professionals only take weekly or monthly measurements of their cabinet power consumption.

This practice leaves you vulnerable to downtime from short-term peaks or undetected overloads. Monitoring actual cabinet power loads from the busway in real-time makes it easy to know the health and capacity of your sites.

For example, if you see a spike in a cabinet's load and have not made any change to its equipment, it might be an early warning sign that you have an issue with a power supply or other piece of equipment in that rack. You can also set thresholds on the power data from your busways and receiving warning and critical alerts based upon threshold violations.



You will be the first to know of any potential problems and can proactively resolve the issue before you experience downtime or users are impacted.

# Monitor actual rack PDU inlet current to ensure loads do not exceed redundancy thresholds.

Modern data centers are densely packed with power-hungry equipment, and data center professionals must deliver increasing amounts of power to these devices.

You must monitor your power redundancy to ensure that power is always available to IT equipment even if there is a power failure on a single power supply or power path.

By monitoring the actual rack PDU inlet current and performing failover analysis, you can be assured that power is redundant and uptime will not be impacted in a failover scenario.

## Cabinet Capacity And Redundancy

**Date Range:** 2019/09/14 – 2019/09/14  
**Location:** New York  
**Racks sorted by:** Failover Utilization (descending)  
**Pairs sorted by:** Failover Utilization (descending)

1A

Rack Summary							
Capacity (kW)						Load (kW)	Utilization
1.00						0.68	67.7%

Pair 1							
	Capacity (A)	DEMO-PDU Raritan PX3-5664V-C5		Management-Rack-PDU2 Raritan PX3-5664V-C5		Failover Simulation	
		Load (A)	Utilization	Load (A)	Utilization	Load (A)	Utilization
Inlet							
L1	24	1.70	7.1%	1.64	6.9%	3.35	13.9%
L2	24	2.10	8.7%	1.44	6.0%	3.54	14.7%
L3	24	1.08	4.5%	0.36	1.5%	1.44	6.0%
Circuit Breakers							
C1	20	1.51	7.6%	1.44	7.2%	2.95	14.8%
C2	20	0.88	4.4%	0.00	—	0.88	4.4%

**Get the full eBook  
by clicking the link  
below.**

[Download My Free eBook](#)

