



POWERLOK

Sales Training

About Gateview Technologies®

- ▶ **Advanced technology and automation for 3X reliability & fast response**
- ▶ **15 Power types available, multiple patents awarded**
- ▶ **Innovation, Six Sigma lean manufacturing, ISO 9001, TUV certified facility**
- ▶ **Expanded manufacturing with new state-of-the-art facility in Florida**
- ▶ **Automated robotic soldering and over 60 custom tooled parts to improve reliability and speed local assembly**

Don't let anyone say you're too young when you're the best...

Founded in 2018 / Rapid End User Acceptance

POWERLOK has proven to be the most reliable rPDU in the industry





Advanced PDU technology

Industry leading power density

0.5% monitoring accuracy

Robotically soldered in the USA

POWERLOK™



First Up...

✓ Make Power Easy - Know: Amps, Volts, Plug, Receptacles, Length & Learn the App.

Just know amps, volts, plug, length, receptacles

Your customer typically tells you the amps, volts and plug type needed.

5 kW Rack

Amps: 30A

Volts: 208V 1PH

Plug: L6-30P

Length: 72"

Receptacles: C13 & C19

Learn the Application!

8.6 kW Rack

Amps: 30A

Volts: 120/208V 3PH

Plug: L21-30P

Length: 72"

Receptacles: C13 & C19

Learn the Application!

17 kW Rack

Amps: 60A

Volts: 208/240V 3PH

Plug: IEC Pin & Sleeve

Length: 72"

Receptacles: C13 & C19

Learn the Application!

Selling POWERLOK - What to Know

20 Minutes

POWER (is easy)

- ▶ rPDUs
- ▶ Powering I.T.
- ▶ rPDU Types
- ▶ Mounting
- ▶ Input Power & Plugs
- ▶ Output receptacles

30 Minutes

POWERLOK

- ▶ Capability & Reliability
- ▶ Finding a rPDU
- ▶ Environment Sensors
- ▶ Switching Cords
- ▶ New Products
- ▶ Sales Demo Kits

20 Minutes

COMPETITORS

- ▶ Summary table
- ▶ Reliability
- ▶ Monitoring
- ▶ Cord locking
- ▶ Delivery

Selling POWERLOK - What to Know

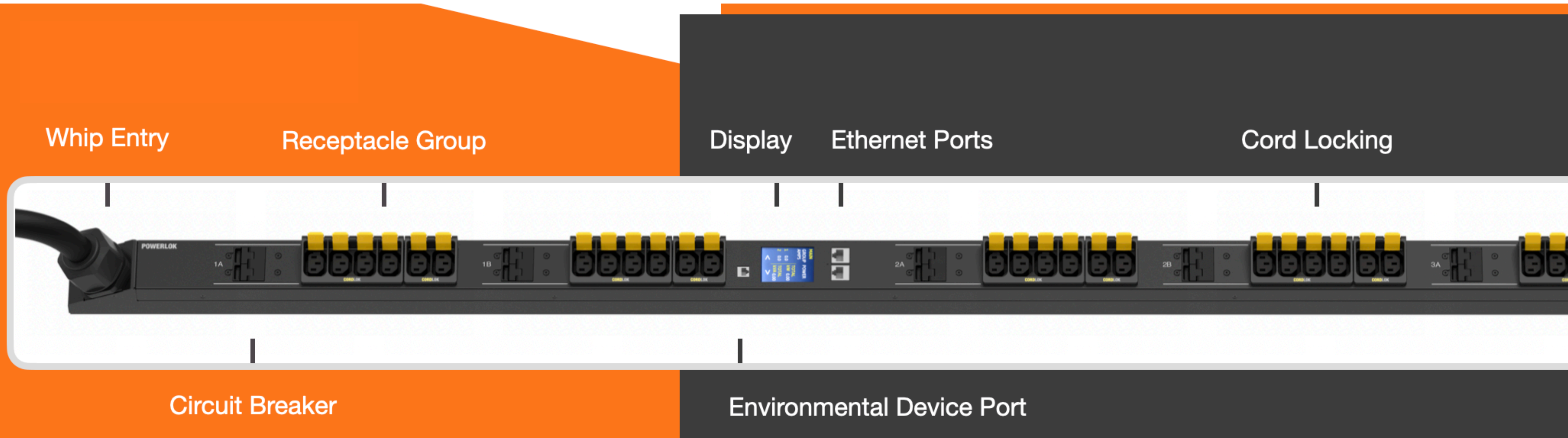
20 Minutes

POWER (is easy)

- ▶ **rPDUs**
- ▶ **Powering I.T.**
- ▶ **rPDU Types**
- ▶ **Mounting**
- ▶ **Input Power & Plugs**
- ▶ **Output receptacles**

Power is Easy

rPDU Aspects



Comprehensive rPDU Description Example

RACK PDU | MONITORED | 72" | 60A 208/240V 3PH (17.2 kW) | 48-C13, CORDLOK | 10FT WHIP | IEC309 (IP44) | CARBON

1

2

3

4

5

6

7

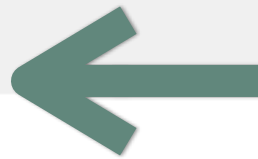
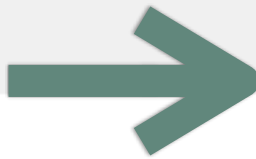
Power is Easy

rPDU Types (see ABC's of rPDU Technology)

Small Computer
Rooms or Closets

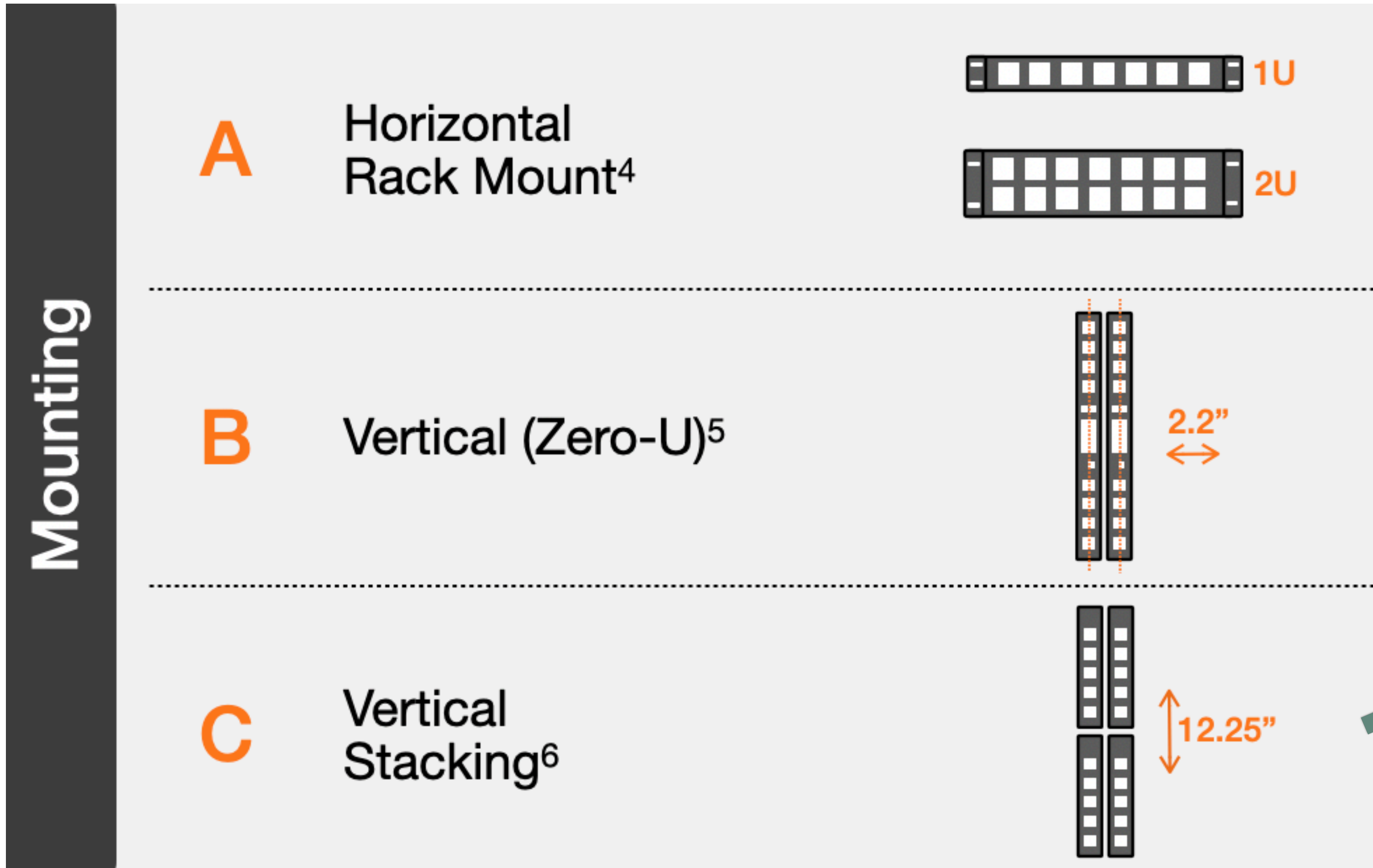


rPDU Type	Features	Diagram	Description	Notes
A Basic Local Metered			BASIC has no power reporting.	
B Monitored Monitored w/Sensors Monitored Ready ¹			MONITORED reports power over Ethernet and on local display. Includes in and out ports for daisy chaining PDUs.	MONITORED W/SENSORS allows the use of PDU sensors for rack environmental monitoring. MONITORED READY allows monitoring to be upgraded or added in the field.
C Switched ² Switched Ready ³ Outlet Monitored			SWITCHED allows remote on/off/reboot control of power to PDU outlets.	SWITCHED READY allows PDU switching cords to be added in the field for on/off/reboot control. OUTLET MONITORED allows reporting of power data for PDU outlets.



Power is Easy

rPDU Mounting (see ABC's of rPDU Technology)



Mounting



Power is Easy

Many Power Options

120/208V

- ⦿ 20A 120V
- ⦿ 30A 120V
- ⦿ 20A 208V 1PH
- ⦿ 30A 208V 1PH
- ⦿ 20A 120/208V WYE 3PH
- ⦿ 30A 120/208V WYE 3PH
- ⦿ 60A 208V WYE 3PH
- ⦿ **Up to 17.2 kW's**



208/240V

- ⦿ 30A 208/240V DELTA 3PH
- ⦿ 35A 208/240V DELTA 3PH
- ⦿ 50A 208/240V DELTA 3PH
- ⦿ 60A 208/240V DELTA 3PH
- ⦿ 80A 208/240V DELTA 3PH
- ⦿ **Up to 23 kW's**



240/415V

- ⦿ 20A 240/415V WYE 3PH
- ⦿ 30A 240/415V WYE 3PH
- ⦿ 60A 240/415V WYE 3PH
- ⦿ **Up to 34 kW's**

Power is Easy

Power Levels: Amps - Volts - Phase (see ABC's of rPDU Technology)

TOP 8 PDUS

Power

A	120V	20A	1.9 kW		L1-N or L1-L2
	208/240V 1PH	30A	2.9 kW		
		20A	3.3 kW		
		30A	5.0 kW		
50A	8.3 kW				
60A	10.0 kW				
B	208/240V 3PH	30A	10.0 kW		DELTA
		35A	11.2 kW		
		50A	14.4 kW		
		60A	17.2 kW		
		100A	28.8 kW		
		120A	34.6 kW		
C	120/208V 3PH	20A	5.7 kW		WYE
		30A	8.6 kW		
		60A	17.3 kW		
		100A	28.8 kW		
		20A	11.5 kW		
C	240/415V 3PH ⁷	30A	17.2 kW		WYE
		60A	34.5 kW		
		100A	57.5 kW		
		120A	69.0 kW		
		20A	11.5 kW		

Power is Easy

Input Plugs: (see rPDU Questions You Should Be Asking)

TOP 4 PDUS

		Volts	Amps	kW	Plug	Wires
Power	A	120V	20A	1.9 kW	L5-20P	3W
			30A	2.9 kW	L5-30P	
		208/240V 1PH	20A	3.3 kW	L6-20P	
			30A	5.0 kW	L6-30P	
	B	208/240V 3PH	50A	8.3 kW	L6-50P	4W
			60A	10.0 kW	L6-60P	
			30A	10.0 kW	L15-30P	
			35A	11.2 kW	CS8365	
			50A	14.4 kW	CS8365	
	C	120/208V 3PH	60A	17.2 kW	IEC 309	5W
			100A	28.8 kW	IEC 309	
			120A	34.6 kW	IEC 309	
240/415V 3PH ⁷		20A	5.7 kW	L21-20P		
		30A	8.6 kW	L21-30P		
		60A	17.3 kW	IEC 309		
		100A	28.8 kW	IEC 309		
		20A	11.5 kW	L22-20P or IEC 309		
		30A	17.2 kW	L22-30P or IEC 309		
		60A	34.5 kW	IEC 309		
		100A	57.5 kW	IEC 309		
		120A	69.0 kW	IEC 309		

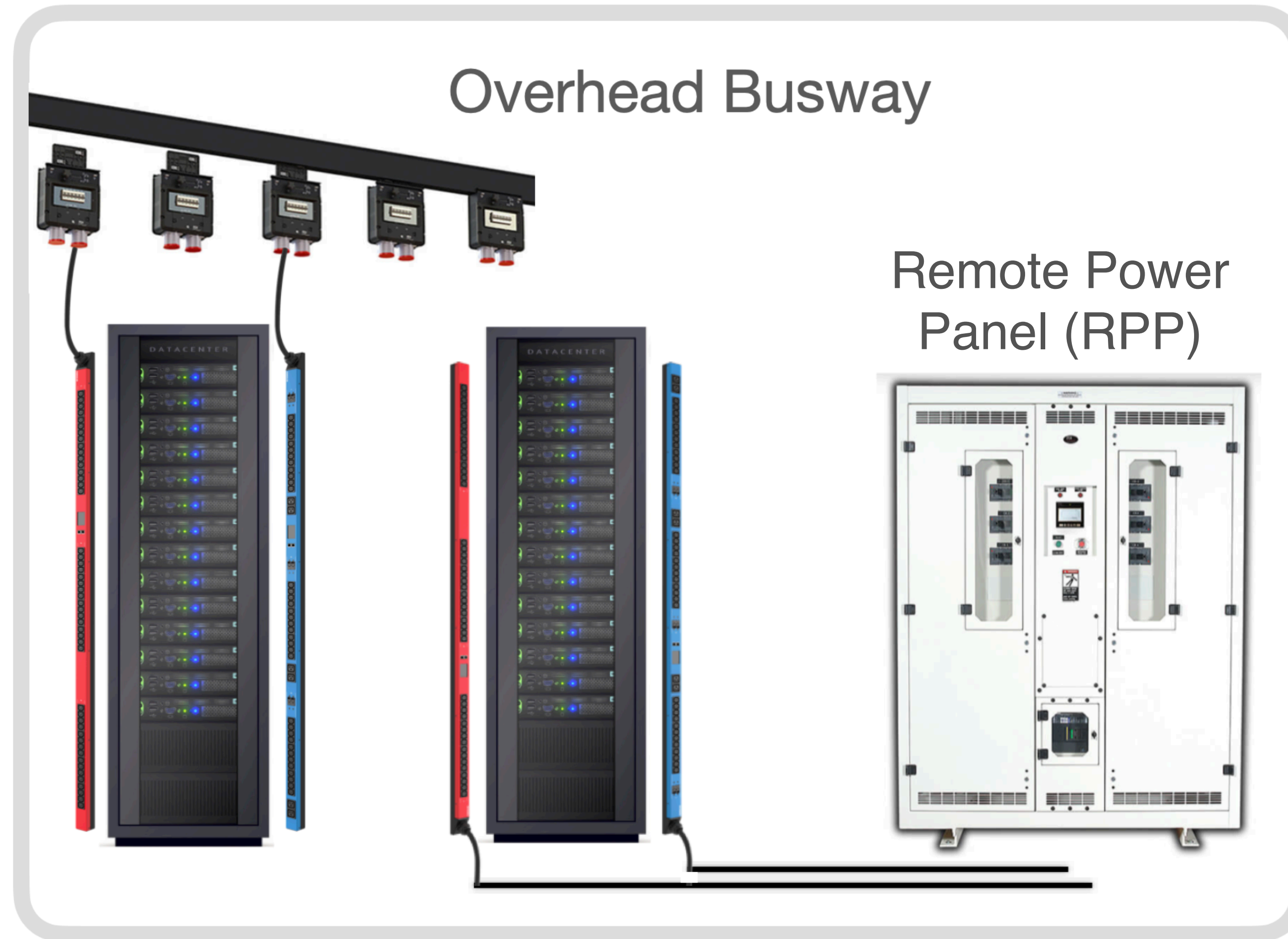


Power is Easy

Connecting the PDU to Power

Overhead Busway

Shorter Whips
Typically 6FT
Out Top of Rack

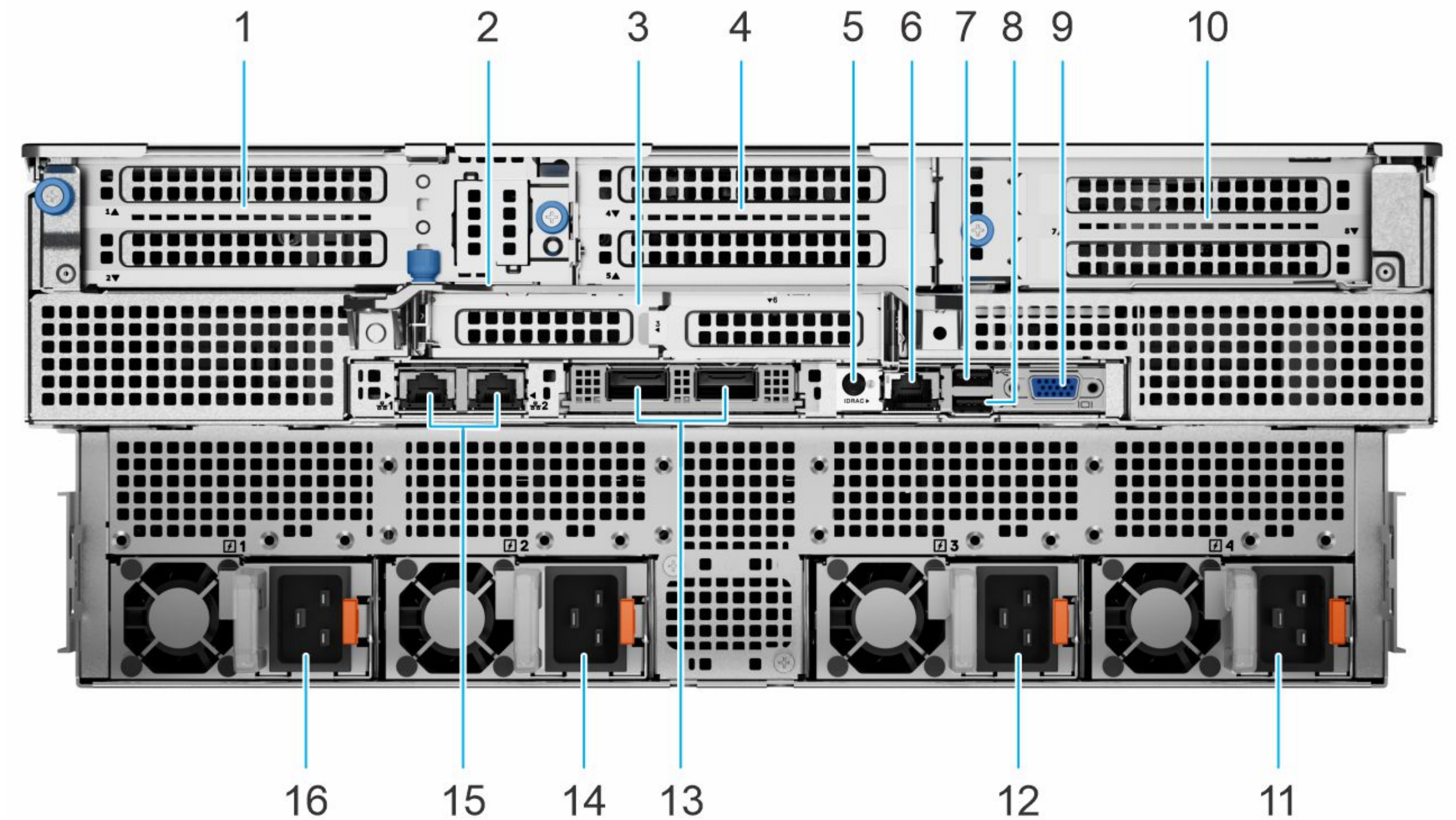


Remote Power
Panel (RPP)

Longer Whips Typically 10FT

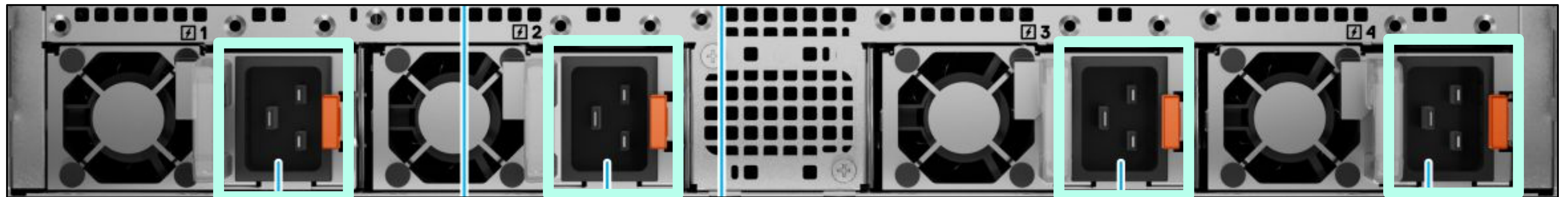
Power is Easy

Greater I.T. being powered - such as an AI Server



PowerEdge XE8545
4U HEIGHT (7")

QUAD C20 INPUT



Power is Easy

Output Receptacles: (see ABC's of rPDU Technology)

120V OUTPUT

208/240V OUTPUT

5-15R

5-20R

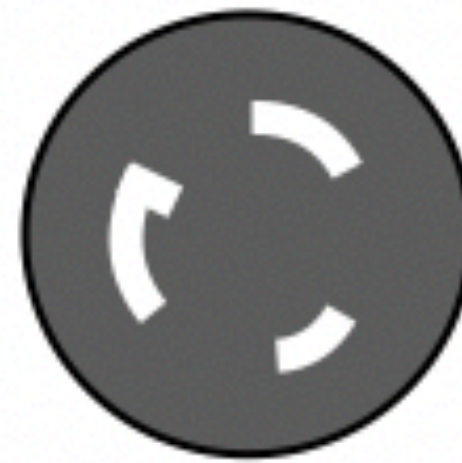
L5-20R

L6-20R

L6-30R

C13

C19



Moderate retention

Inherent locking

Methods vary by supplier:
Poor to high retention,
locking with special cords, or
locking with standard cords

Selling POWERLOK - What to Know

20 Minutes

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30 Minutes

POWERLOK

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- ▶ Finding a rPDU
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POWERLOK Summary

Know the Capability. Know the Reliability.

Capability

- Slimmest profiles
- Multiple lengths
- Superior cord locking
- Scalable switching
- Daisy-chain temp/humidity sensors
- Colors at no additional cost*

* Small minimum order quantity applies

Reliability

- Local - Made in the USA
- 100% robotically soldered connections
- 3X reliability per new published study
- 70+ Models in 1-2 weeks, 1400+ Models in 3-5 weeks



PROFILE | 2.18" X 2.9" (2.0" W/O CORDLOK)

LENGTHS | 24", 36", 41", 72", 82"

COLORS | CARBON, RED, WHITE, BLUE

POWERLOK

15 Power Types

8200-8300 SERIES | 120/208V

- 20A 120V
- 30A 120V
- 20A 208V 1PH
- 30A 208V 1PH
- 20A 120/208V WYE 3PH
- 30A 120/208V WYE 3PH
- 60A 208V WYE 3PH
- Up to 17.2 kW's



8400-8600 SERIES | 208/240V

- 30A 208/240V DELTA 3PH
- 35A 208/240V DELTA 3PH
- 50A 208/240V DELTA 3PH
- 60A 208/240V DELTA 3PH
- 80A 208/240V DELTA 3PH
- Up to 23 kW's



8700-8800 SERIES | 240/415V

- 20A 240/415V WYE 3PH
- 30A 240/415V WYE 3PH
- 60A 240/415V WYE 3PH
- Up to 34 kW's

POWER TYPES | 15
LENGTHS | 24", 36", 41", 72", 82"



Power is Easy

Greater Reliability - Customers expect this.

Better from the inside out

100% robotically soldered connections for 3X reliability and slimmest profiles.



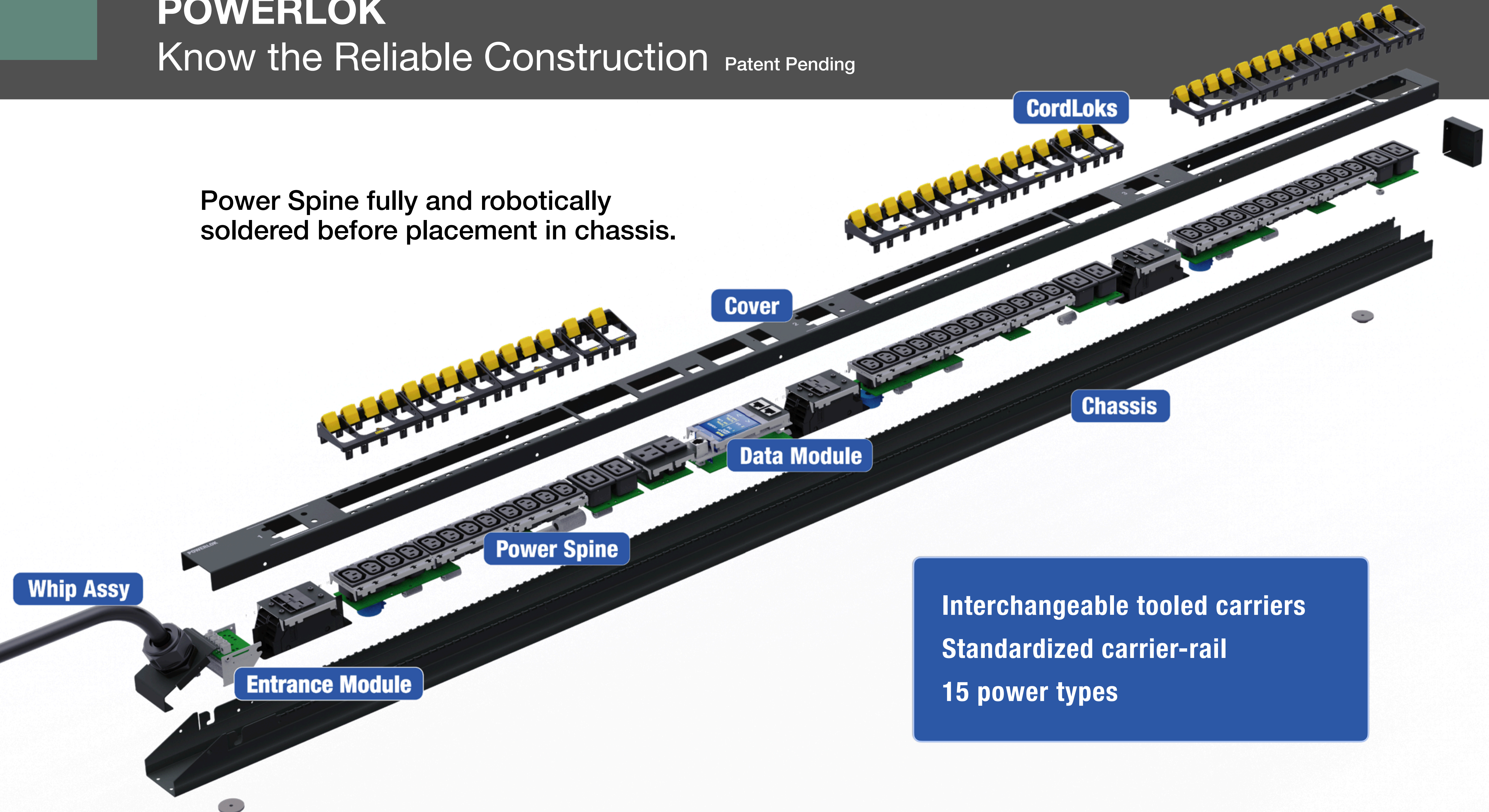
Evaluated to be 3X less likely to experience power connection failure. Steve Fairfax, mtechnology.



POWERLOK

Know the Reliable Construction Patent Pending

Power Spine fully and robotically soldered before placement in chassis.



CordLoks

Cover

Chassis

Data Module

Power Spine

Whip Assy

Entrance Module

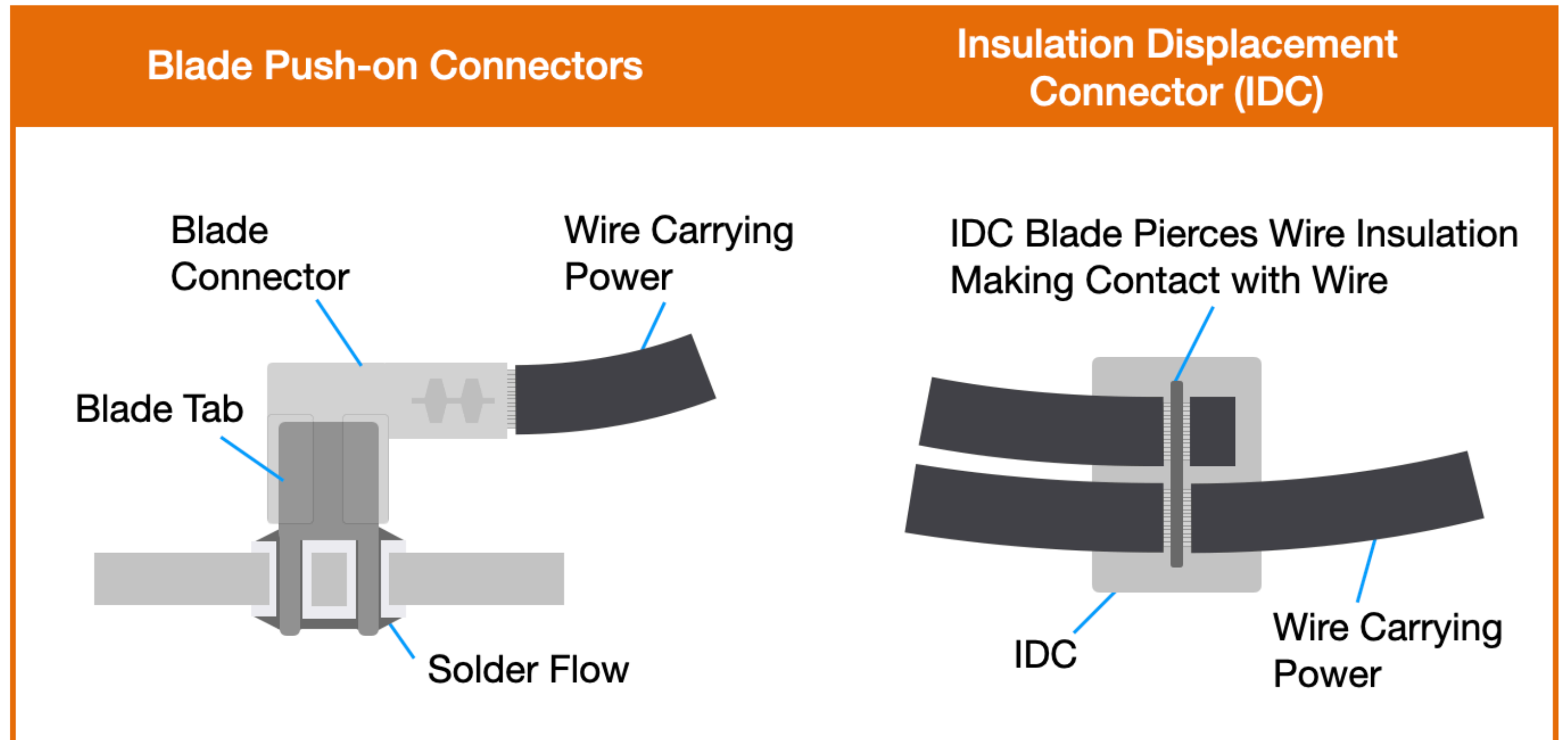
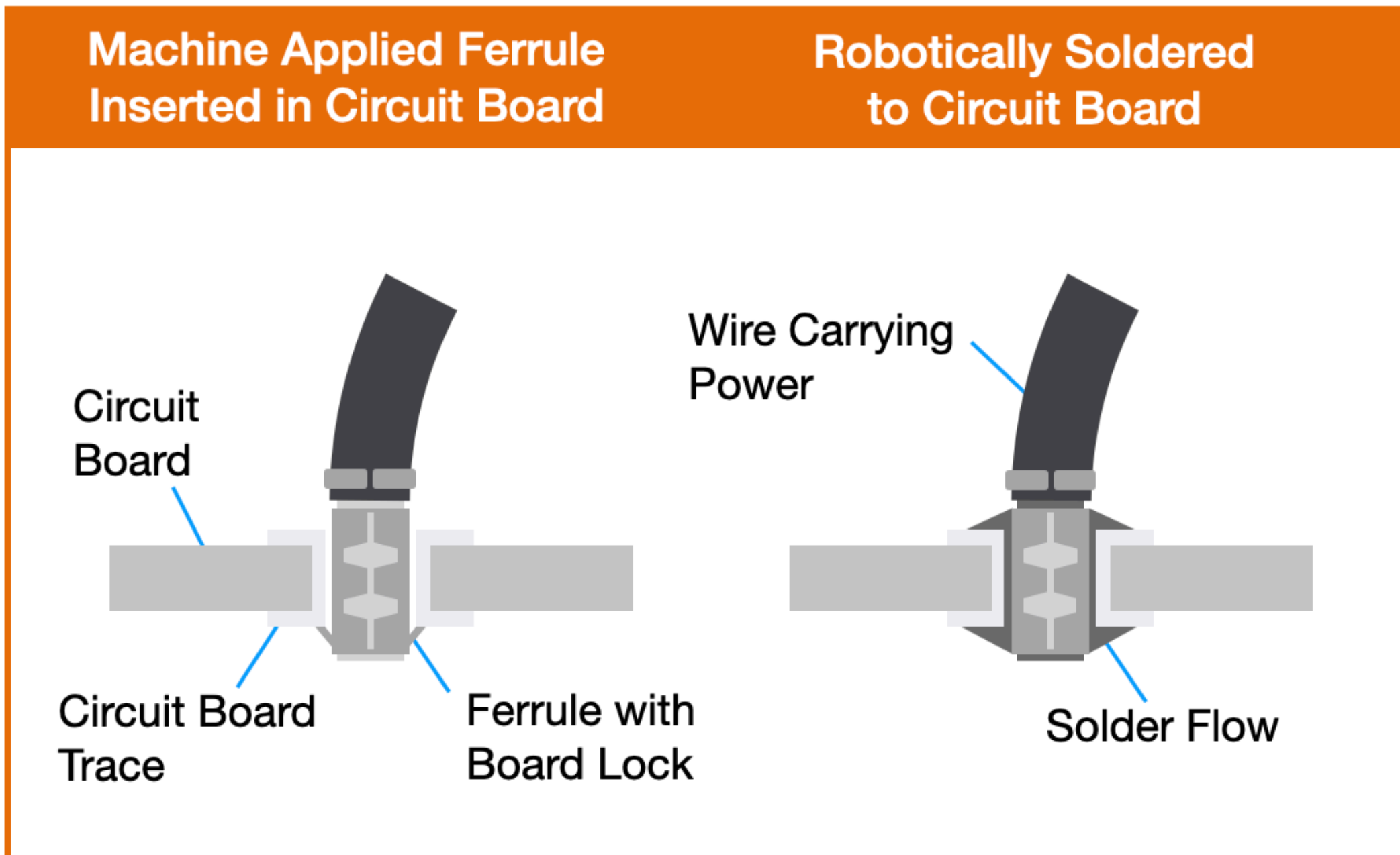
Interchangeable tooled carriers
Standardized carrier-rail
15 power types

POWERLOK

Fewer More Reliable Connections

Robotically Soldered - 3X More Reliable

Hand Assembled IDC & Blade Connectors - Overheat



Number of Internal Contact Points

Acceptable Amperage per rPDU Receptacle

30-40

3-20 Amps

Number of Internal Contact Points

Acceptable Amperage per rPDU Receptacle

60-80

< 3.0 Amps

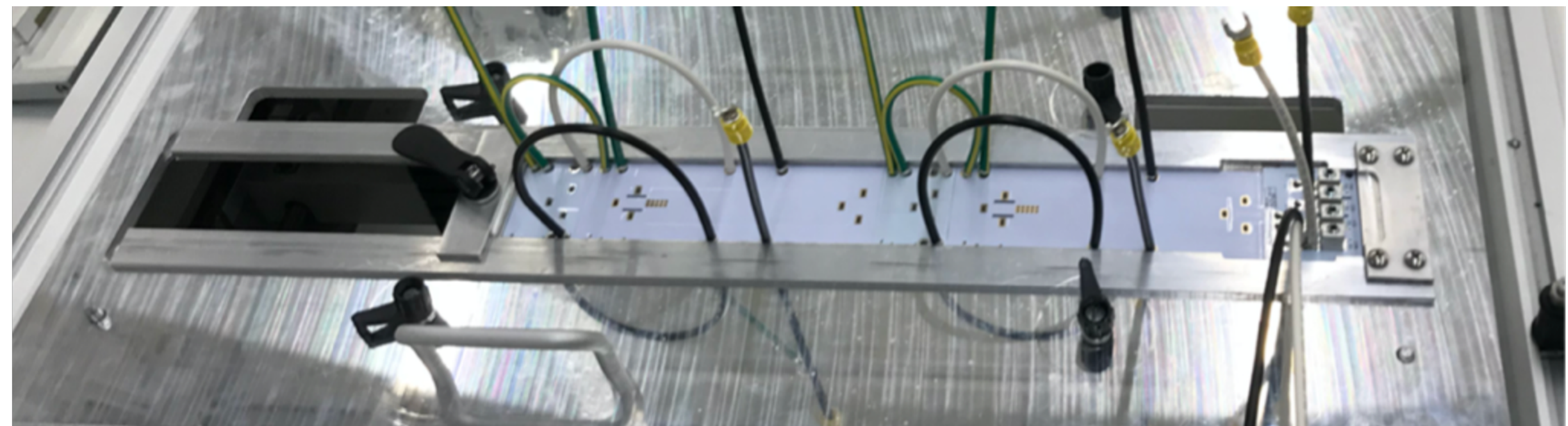
POWERLOK

Fully Automated Robotic Soldering

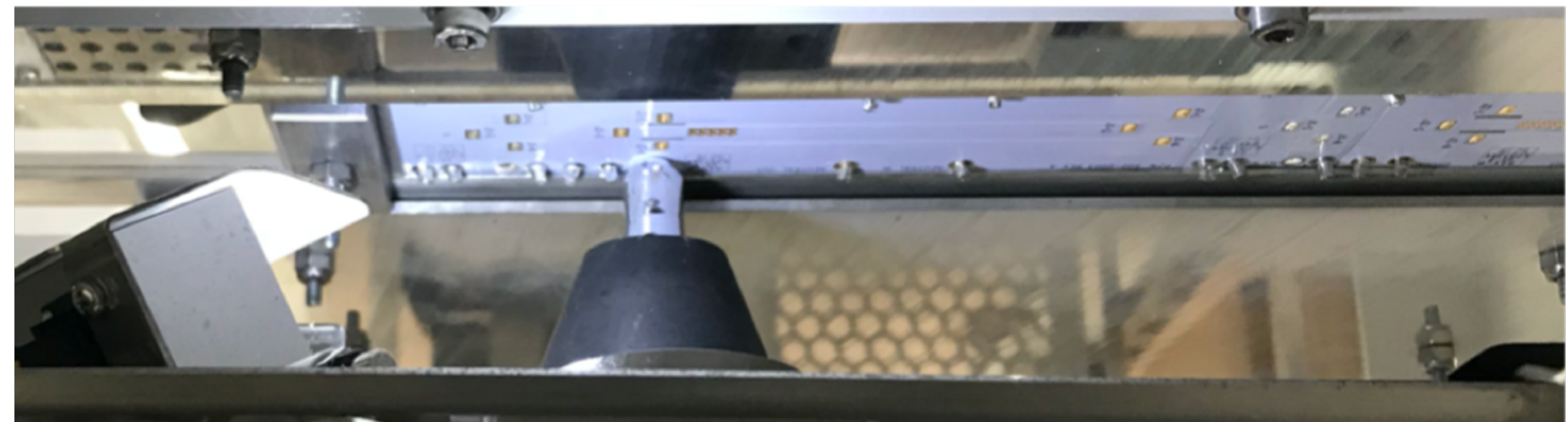
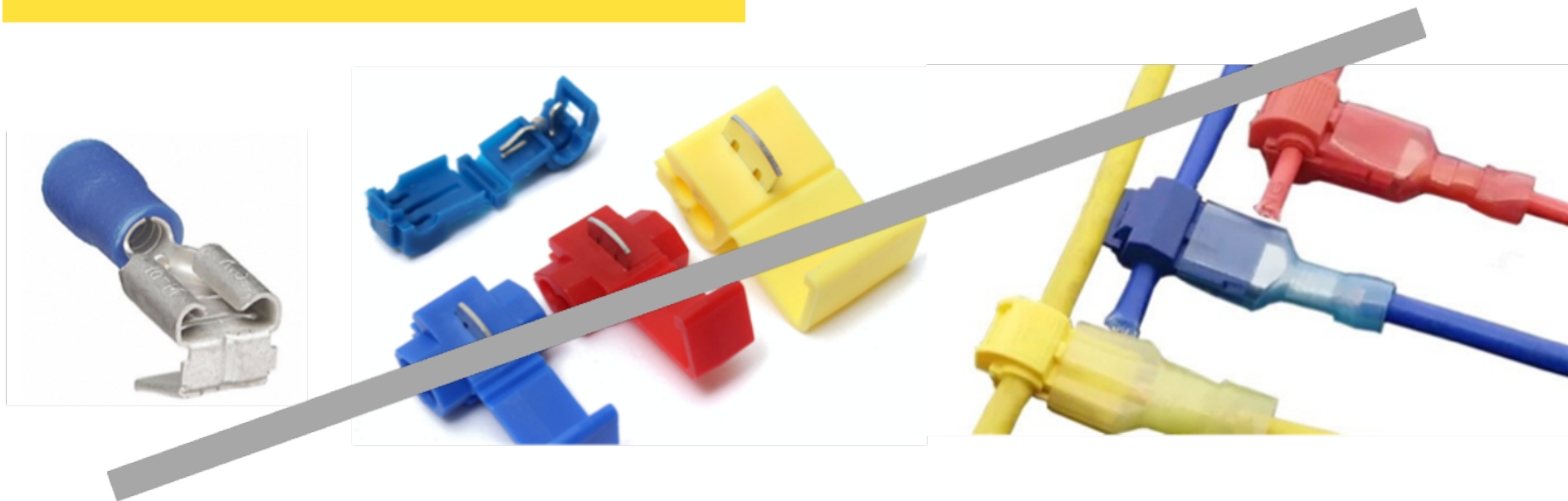
Automated soldering from line input to every receptacle eliminates all mechanical connections

- Follows NASA standards
- Reduced hand-work
- Eliminates poor termination methods
- No rat's nest wiring as in legacy products
- Greater power density
- Low cost localized manufacturing

Automated:



Eliminated:



Robotic head making solder terminations on receptacle boards

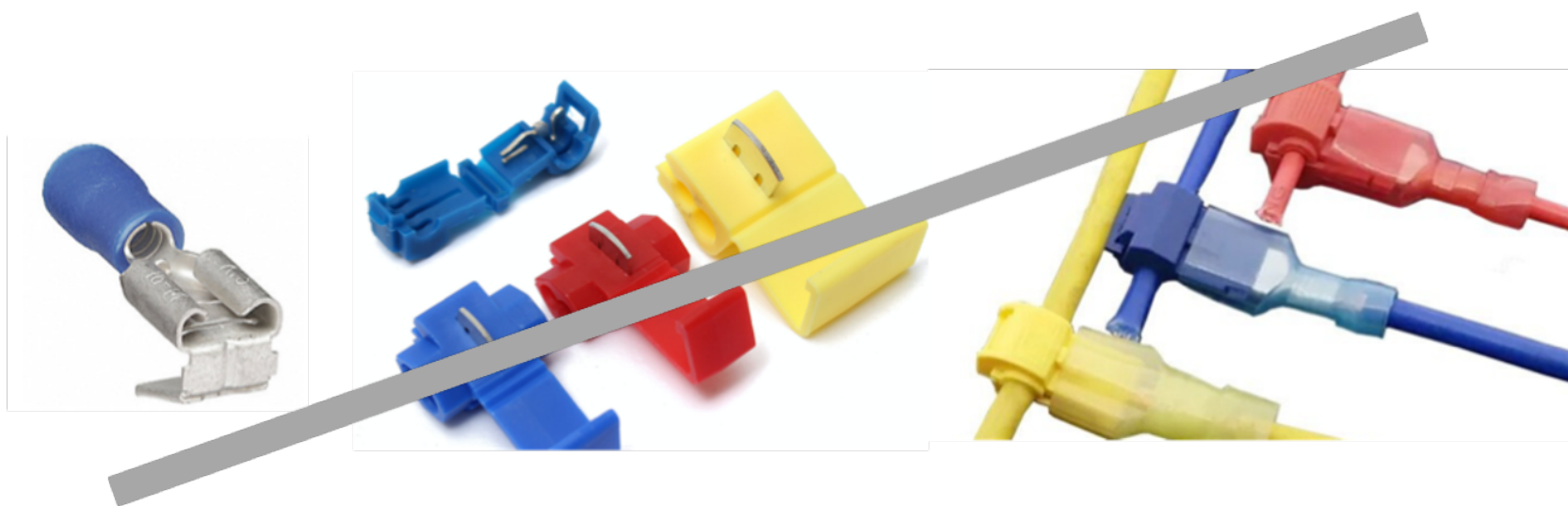
POWERLOK

Fully Automated Robotic Soldering

Automated soldering from line input to every receptacle eliminates all mechanical connections

- Follows NASA standards
- Reduced hand-work
- Eliminates poor terminations
- No rat's nest wiring
- Greater power density
- Low cost localized manufacturing

Eliminated:



Automated:

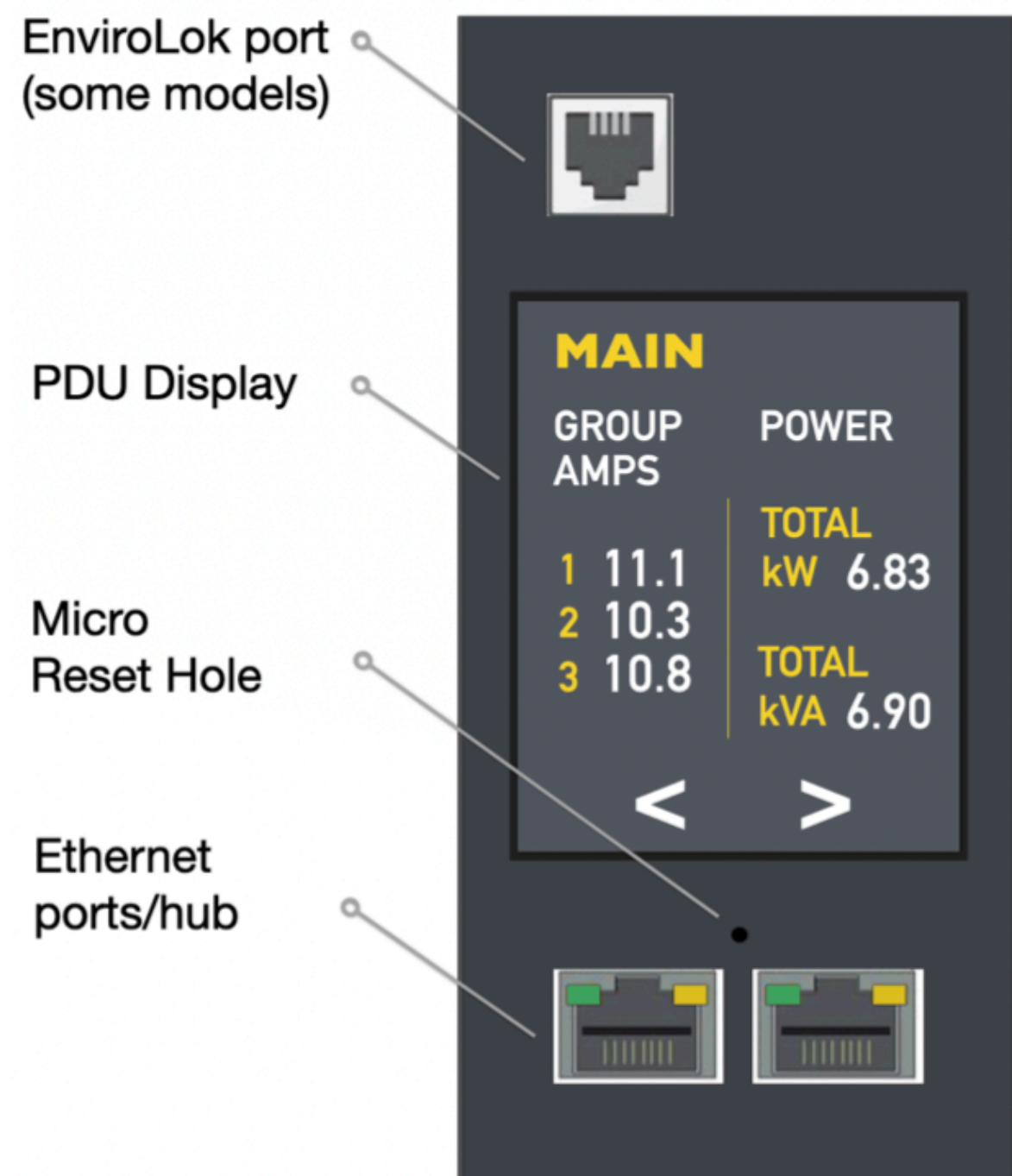


POWERLOK Software

For Power & Environmental Monitoring and Switching

Power Monitoring

PowerLOK models with monitoring include a local touchscreen display and ethernet communication.



MAIN	
GROUP AMPS	POWER
1 11.1	TOTAL kW 6.83
2 10.3	TOTAL kVA 6.90
3 10.8	

GROUP	
kW kVA	
1	2.28 2.29
2	2.09 2.13
3	2.25 2.25

LINE		
AMPS	kW	kVA
A 20.7	2.48	2.48
B 19.8	2.30	2.36
C 17.1	2.03	2.05

PF / VOLTS		
LINE PF	GROUP PF	VOLTS
A 1.00	1 0.99	207
B 0.98	2 0.98	207
C 0.99	3 1.00	208

ENVIROLOK		
TEMP	Rh	
A 72°F	37%	
B 71°F	36%	
C 68°F	35%	
D 95°F	42%	
Internal Temp:	37C	

SWITCHLOK	
PDU Switching & Metering Cords:	
	32 Joined
On State:	28
Off State:	4

ADMIN	
Friendly Name:	PowerLok PDU2
Serial Number:	20US0K1190001
Firmware Ver.:	0.3.0.rc01
IP Address:	(static) 198.168.2.100
IPv6 Address:	007A:491D:DC1A:F074
MAC Address:	70:E0:1B:23:CD:45

SETTINGS	
Alarm Thresholds	
Primary Only 80%	<input checked="" type="radio"/>
Primary Redundant 40%	<input type="radio"/>
Primary Redundant 45%	<input type="radio"/>
Rotate Display	<input checked="" type="radio"/>

Advance display screen

Data category

Alarm threshold set options

Rotate screen to PDU orientation

Monitoring accuracy

- Voltage: ± 0.5% at nominal
- Current: ± 1.0% of measurement from 250 mA – 1A
- Current: ± 0.5% of measurement from 1A – 30A

POWERLOK Software

Know the App.! Real time (now), Historical (2 weeks) & Peak (max) Power Data



Rating: 30A 120/208V 3PH Friendly Name: RACK D112-A PD

[PowerLok](#)

[SwitchLok](#)

[Admin](#) ▾

PowerLOK Summary

Levels NOW

TOTAL kW / kVA	7.54 / 8.54
INTERNAL TEMP	41 C
SENSOR A TEMP / Rh	72 F / 38%
SENSOR B TEMP / Rh	71 F / 37%
SENSOR C TEMP / Rh	68 F / 35%
SENSOR D TEMP / Rh	95 F / 42%

GROUP AMPS		
1	12.2	
2	10.3	
3	10.8	
LINE AMPS		
A	22.2	
B	20.3	
C	20.8	

GROUP kW / kVA		
1	2.51 / 2.63	
2	2.42 / 2.58	
3	2.54 / 2.64	
LINE kW / kVA		
A	3.20 / 3.33	
B	3.31 / 3.45	
C	3.83 / 3.88	

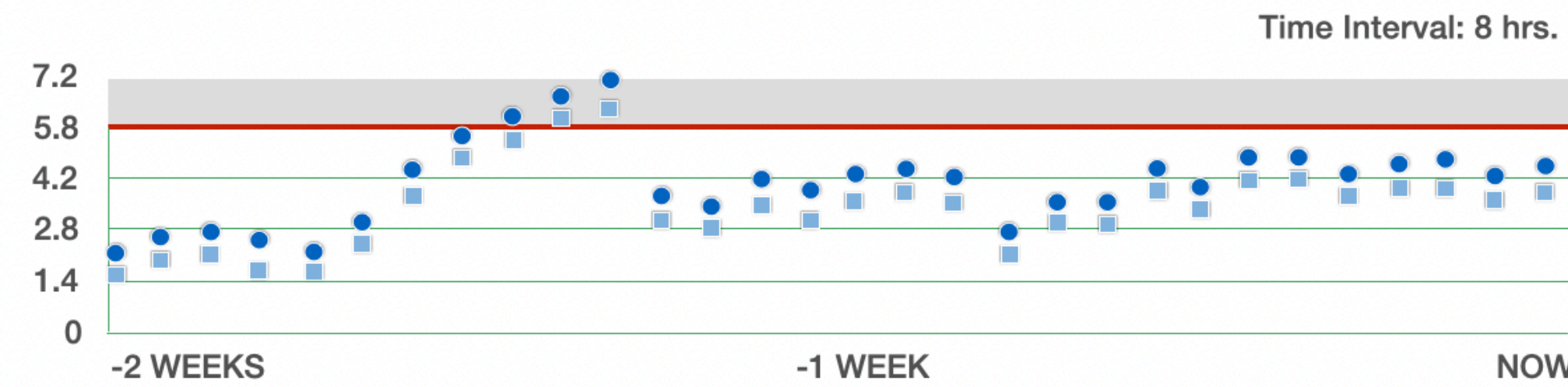
GROUP PF / VOLTS		
1	0.98 / 208	
2	0.97 / 207	
3	0.94 / 207	
LINE PF		
A	0.98	
B	0.97	
C	0.94	

PowerLok Historical Graphs / Log

Levels over past two week period

TOTAL kW / kVA ▾ GROUP kW / kVA ▾ GROUP AMPS ▾ GROUP PF / VOLTS ▾

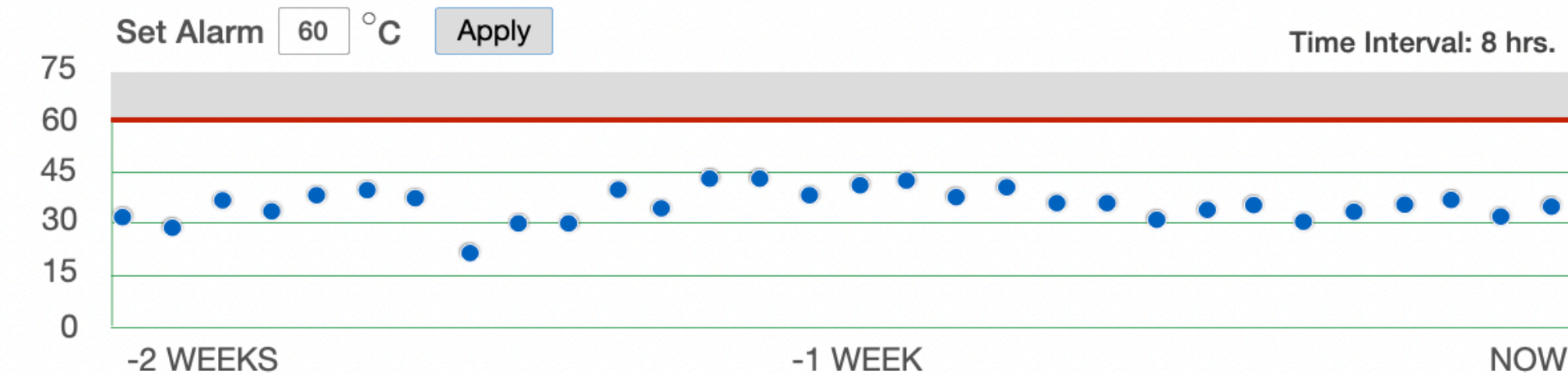
PEAK	5.94 kW	9.45 kVA
NOW	5.76 kW	5.54 kVA



INTERNAL PDU TEMP ▾

PEAK	45C
NOW	41C

Fahrenheit
 Celsius



PowerLok Settings ▾

SwitchLok Master Control ▾

Events

- 2021-10-14 3:40 PM Line A Over-current cleared (9A, 10A)
- 2021-10-14 2:20 PM Line A Over-current (11A, 10A)
- 2021-10-14 2:20 PM Line B Over-current (11A, 10A)
- 2021-10-14 2:20 PM Line C Over-current (11A, 10A)
- 2021-10-14 2:20 PM PDU Over-temperature Cleared (62C, 60C)
- 2021-10-14 2:20 PM PDU Over-temperature (62C, 60C)
- 2021-10-14 2:20 PM EL-A Rack Over-temperature Cleared (62C, 60C)
- 2021-10-14 2:20 PM EL-A Rack Over-temperature (62C, 60C)
- 2021-10-14 2:20 PM EL-A Rack Over-humidity Cleared (62C, 60C)
- 2021-10-14 2:20 PM EL-A Rack Over-humidity (62C, 60C)
- 2021-05-12 2:40 PM Power up - No Events
- 2021-04-12 2:20 PM User name or password changed

Clear History

About to clear Past Event history Are you sure?

Find a POWERLOK

Quickly get specs & pricing for 1400+ models

1

Select a PDU

Enter Model Number

PowerLok PDUs are built to order. Chose a category based on your delivery and feature requirements. For additional details refer to a product data sheet.

Fast Response Models (1-2 weeks) Select Models (3-5 weeks) Build Models (8-10 weeks)
48 Minimum PDU Order

PDU Type

BASIC

MONITORED

SWITCHED READY

Voltage Series

208/240V 1PH

120/208V 3PH

208/240V 3PH

240/415V 3PH

Amperage

30A

35A

50A

60A

PDU Length

72"

82"

- 70+ Fast-Response Models (1-2 weeks)
- 1400+ Select Models (3-5 weeks)
- Specifications all on selector
- Pricing with login

2

Results: Select model below to access product page

RACK PDU, SWITCHED READY, 72", 60A 208/240V 3PH (17.2 KW), IEC 309 (IP44), CORDLOK

Receptacle Group	CARBON		RED		WHITE		BLUE	
	6 FT Whip	10 FT Whip	6 FT Whip	10 FT Whip	6 FT Whip	10 FT Whip	6 FT Whip	10 FT Whip
42-C13	PL8606S-06C	PL8606S-10C	PL8606S-06R	PL8606S-10R	PL8606S-06W	PL8606S-10W	PL8606S-06B	PL8606S-10B
36-C13	PL8601S-06C	PL8601S-10C	PL8601S-06R	PL8601S-10R	PL8601S-06W	PL8601S-10W	PL8601S-06B	PL8601S-10B
36-C13 & 6-C19	🕒 PL8607S-06C	🕒 PL8607S-10C	PL8607S-06R	PL8607S-10R	PL8607S-06W	PL8607S-10W	PL8607S-06B	PL8607S-10B
24-C13 & 6-C19	PL8602S-06C	PL8602S-10C	PL8602S-06R	PL8602S-10R	PL8602S-06W	PL8602S-10W	PL8602S-06B	PL8602S-10B
24-C13 & 12-C19	🕒 PL8608S-06C	🕒 PL8608S-10C	PL8608S-06R	PL8608S-10R	PL8608S-06W	PL8608S-10W	PL8608S-06B	PL8608S-10B
18-C13 & 18-C19	🕒 PL8609S-06C	🕒 PL8609S-10C	PL8609S-06R	PL8609S-10R	PL8609S-06W	PL8609S-10W	PL8609S-06B	PL8609S-10B
30-C19	PL8621S-06C	PL8621S-10C	PL8621S-06R	PL8621S-10R	PL8621S-06W	PL8621S-10W	PL8621S-06B	PL8621S-10B

Find a POWERLOK

When to Select or Build and how does that affect lead-time and price?

1 Select a PDU

PowerLok PDUs are built to order. Chose a category based on your delivery and feature requirements. For additional details refer to a product data sheet.

Fast Response Models (1-2 weeks)
 Select Models (3-5 weeks)
 Build Models (8-10 weeks)
48 Minimum PDU Order

PDU Type


Voltage Series

Amperage

PDU Length

3 PL8608S-10C

Rack PDU, Switched Ready, 72", 60A 208/240V 3PH (17.2 kW), 24-C13, 12-C19, 10FT Whip, IEC 309 (IP44), Carbon, CORDLOK



Example image shown. See specification for actual receptacle count.

QTY:

2 Results: Select model below to access product page

RACK PDU, SWITCHED READY, 72", 60A 208/240V 3PH (17.2 kW), IEC 309 (IP44), CORDLOK

Receptacle Group	CARBON		RED		WHITE		BLUE	
	6 FT Whip	10 FT Whip	6 FT Whip	10 FT Whip	6 FT Whip	10 FT Whip	6 FT Whip	10 FT Whip
42-C13	PL8606S-06C	PL8606S-10C	PL8606S-06R	PL8606S-10R	PL8606S-06W	PL8606S-10W	PL8606S-06B	PL8606S-10B
36-C13	PL8601S-06C	PL8601S-10C	PL8601S-06R	PL8601S-10R	PL8601S-06W	PL8601S-10W	PL8601S-06B	PL8601S-10B
36-C13 & 6-C19	PL8607S-06C	PL8607S-10C	PL8607S-06R	PL8607S-10R	PL8607S-06W	PL8607S-10W	PL8607S-06B	PL8607S-10B
24-C13 & 6-C19	PL8602S-06C	PL8602S-10C	PL8602S-06R	PL8602S-10R	PL8602S-06W	PL8602S-10W	PL8602S-06B	PL8602S-10B
24-C13 & 12-C19	PL8608S-06C	PL8608S-10C	PL8608S-06R	PL8608S-10R	PL8608S-06W	PL8608S-10W	PL8608S-06B	PL8608S-10B
18-C13 & 18-C19	PL8609S-06C	PL8609S-10C	PL8609S-06R	PL8609S-10R	PL8609S-06W	PL8609S-10W	PL8609S-06B	PL8609S-10B
30-C19	PL8621S-06C	PL8621S-10C	PL8621S-06R	PL8621S-10R	PL8621S-06W	PL8621S-10W	PL8621S-06B	PL8621S-10B

Find a POWERLOK Form for Build Request

BUILD DESCRIPTION

RACK PDU,

Additional Build Requirements

ENTER OTHER DETAILS FOR BUILD

REQUEST QUOTE

1

Click rPDU Aspects

2

Request Quote

2

Enter Contact Info

Fast Response Models (1-2 weeks) Select Models (3-5 weeks) Build Models (8-10 weeks)

12 Minimum PDU Order

48 Minimum PDU Order

PDU Type

BASIC

MONITORED

SWITCHED READY

Voltage

208V/240 1PH

120/208V 3PH

208/240V 3PH

240/415V 3PH

Amperage

20A

30A

35A

50A

60A

Plug Type

NEMA

IEC 309

CS8365C

Whip Length (feet)

3

5

7

9

11

13

15

PDU Length (inches)

24"

36"

41"

46"

72"

82"

92"

Receptacles

ALL C13

MAX C13 + 2-C19
PER GROUP

MAX C13 + 3-C19
PER GROUP

MAX C13 + 4-C19
PER GROUP

ALL C19

Color

BLUE

CARBON

RED

WHITE

CordLok

NO

YES

Daisy Chain Environmental Monitoring

RACK PDU ENVIRONMENTAL SENSORS

Accuracy

- 0.2C temperature accuracy
- 2% Rh accuracy

Capability

- Magnetic or velcro attachment
- Daisy chain sensors as needed
- Up to 4 sensors per PDU
- Only 1.4in x 1.4in x .81in size

Reliability

- Low power over supplied cable
- Battery-less sensors



Real time, peak and historical data

POWERLOK Software

Real time, peak and historical environmental data

PowerLOK Summary

Levels NOW

TOTAL kW / kVA	7.54 / 8.54
INTERNAL TEMP	41 C
SENSOR A TEMP / Rh	72 F / 38%
SENSOR B TEMP / Rh	71 F / 37%
SENSOR C TEMP / Rh	68 F / 35%
SENSOR D TEMP / Rh	95 F / 42%

GROUP AMPS	1	12.2
	2	10.3
	3	10.8
LINE AMPS	A	22.2
	B	20.3
	C	20.8

GROUP kW / kVA	1	2.51 / 2.63
	2	2.42 / 2.58
	3	2.54 / 2.64

LINE kW / kVA	A	3.20 / 3.33
	B	3.31 / 3.45
	C	3.83 / 3.88

GROUP PF / VOLTS	1	0.98 / 208
	2	0.97 / 207
	3	0.94 / 207

LINE PF	A	0.98
	B	0.97
	C	0.94

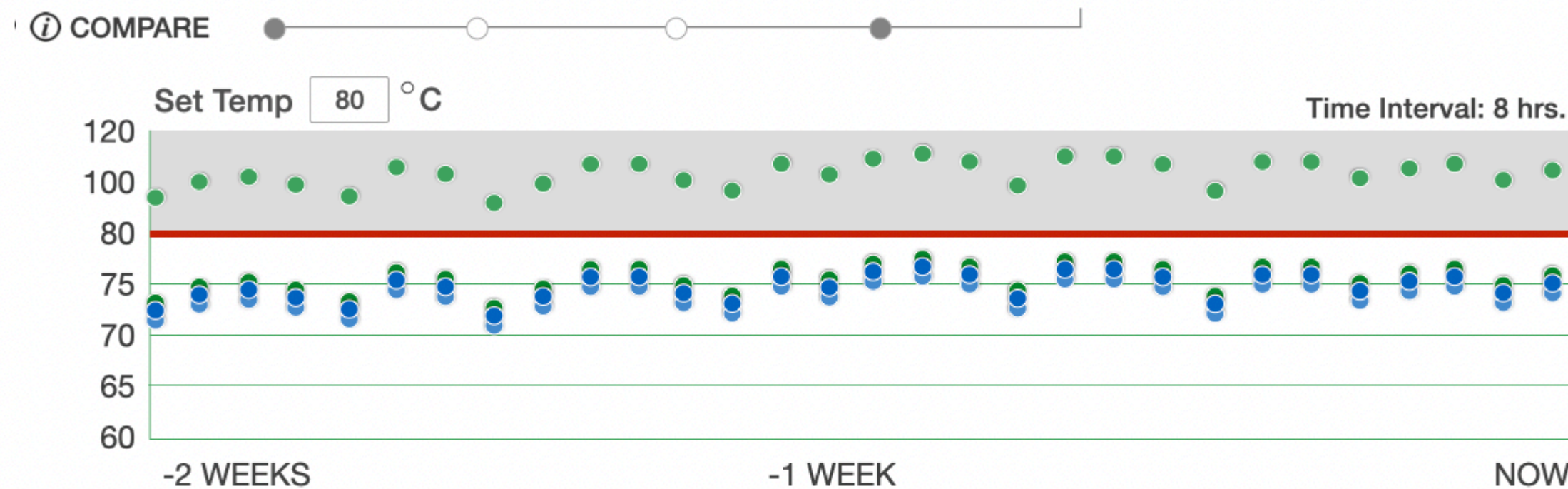
EnviroLok Historical Graphs / Log

Levels over past two week period

TEMPERATURE

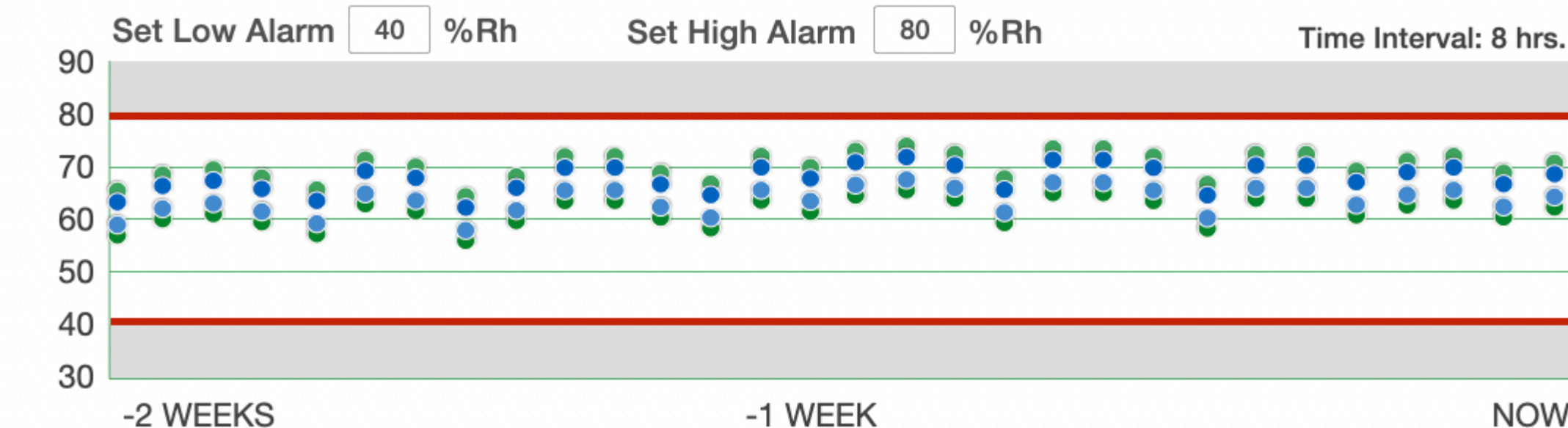
	A	B	C	D	ΔT
PEAK	78 F	71 F	79 F	109 F	31 F
NOW	72 F	62 F	72 F	107 F	35 F

● Fahrenheit
○ Celsius



HUMIDITY (Rh)

	A	B	C	D
PEAK	65	64	65	71
NOW	62	61	62	70

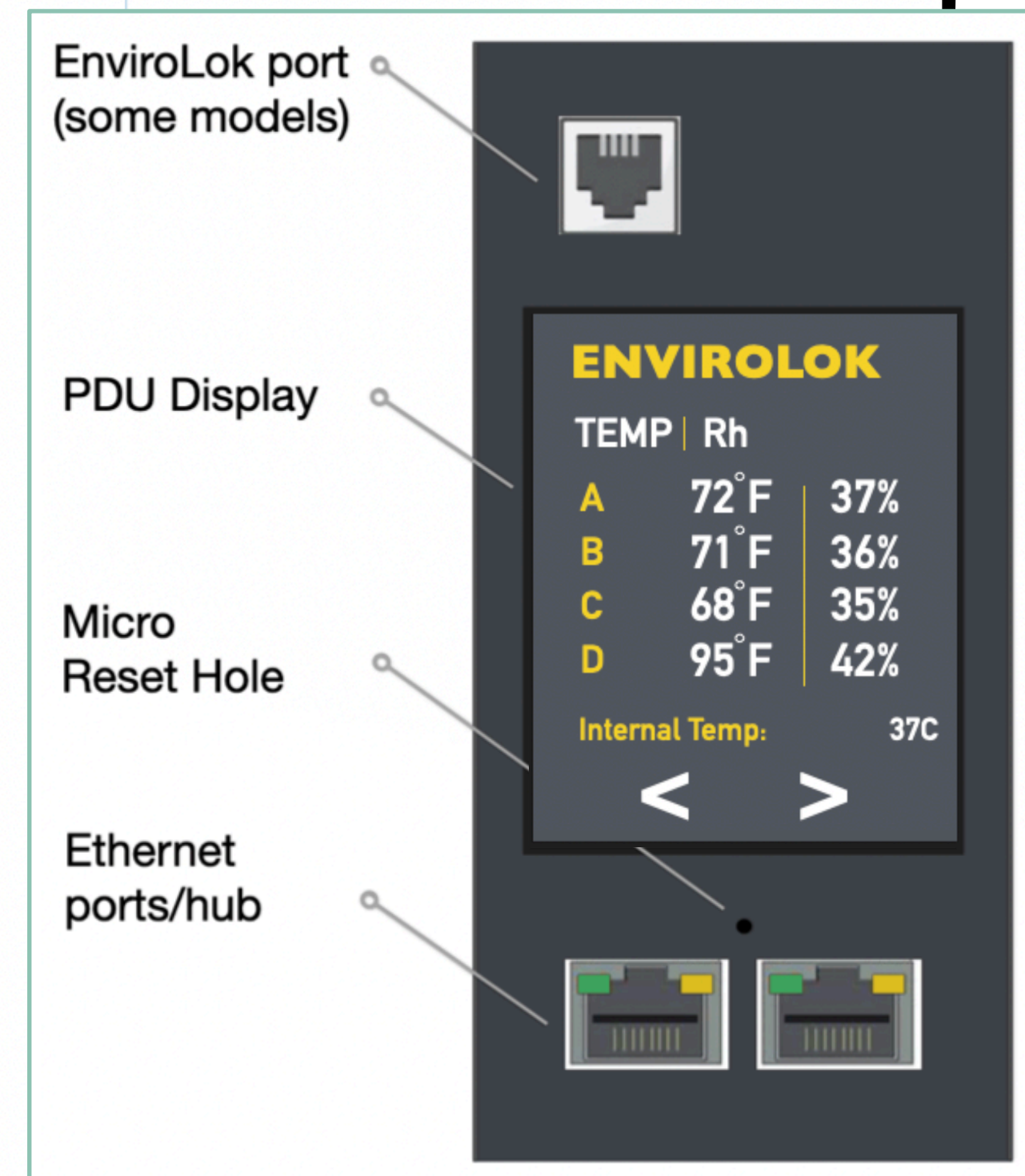


PowerLok Settings

SwitchLok Master Control

Events

- 2021-10-14 3:40 PM Line A Over-current cleared (9A, 10A)
- 2021-10-14 2:20 PM Line A Over-current (11A, 10A)
- 2021-10-14 2:20 PM Line B Over-current (11A, 10A)



PDU Switching Cords - Add When Needed

Patented

Advanced PDU Switching Technology

Switched Ready PDUs are remotely monitored PDUs that can be upgraded for switching at any time just by adding SwitchLOK cords.

- Switched Ready PDUs are the same size as monitored PDUs.
- More receptacles and more room to access racked equipment.



WHAT YOU NEED. WHEN YOU NEED IT.
SWITCHLOK
Patented switching technology



POWERLOK Software

For Power & Environmental Monitoring and Switching

SwitchLok Historical Graphs & Control

Levels for past two weeks period, peak and now.
Graphing interval is 8 hours.

Viewing ▾

Grouping Action ▾

All Information
Collapse Graphs

Reboot per sequence

RUN

RU	ID	Friendly Name	State	Seq.	Delay (s)	kVAh	Control
47	1A	BAE SYSTEMS, DELL R730, INSTALLED: 4/10/20 DR18 S. FLYNN		1	4	2880	▾ ○
45	1A	BAE SYSTEMS, DELL R730, INSTALLED: 4/10/20 DR18 S. FLYNN		2	4	2880	▾ ●
43	1A	BAE SYSTEMS, DELL R730, INSTALLED: 4/10/20 DR18 S. FLYNN		3	4	2880	▾ ●
41	1A	BAE SYSTEMS, DELL R730, INSTALLED: 4/10/20 DR18 S. FLYNN		4	4	2880	▾ ●
39	1A	BAE SYSTEMS, DELL R730, INSTALLED: 4/10/20 DR18 S. FLYNN		5	4	2880	▾ ●

PowerLok Settings ▾

Amperage Alarm Setting

Primary Only 80%

Primary Redundant 40%

Primary Redundant 45%

Enable Custom

Set Custom %

Manage SwitchLok ⓘ

SwitchLok Master Control ▾

Master Switch: ⓘ
On/Off

Master Reboot: ⓘ

kVAh Reset: ⓘ

Start Delay (s): ⓘ

Sequence Delay (s): ⓘ

Off-On Delay (s): ⓘ

Utility Apply Delay (s): ⓘ

POWERLOK Software

For Power & Environmental Monitoring and Switching

SwitchLOK

SwitchLOK devices allow electronic switching and monitoring capabilities of PDU outlets. They communicate wirelessly with associated PDUs equipped with SwitchLOK support.



LED meaning

LED Action	LED Color	Meaning
Fast Blink	Green	Not associated or joined with PDU
Slow Blink	Green	SwitchLOK is in joining mode, ready to be accepted from PDU Web interface
Continuous	Green	SwitchLOK is successfully joined with PDU
Continuous	Red	SwitchLOK relay is open

POWERLOK Software

For Power & Environmental Monitoring and Switching

SwitchLOK

SwitchLOK devices allow electronic switching and monitoring capabilities of PDU outlets. They communicate wirelessly with associated PDUs equipped with SwitchLOK support.



LED meaning

LED Action	LED Color	Meaning
Fast Blink	Green	Not associated
Slow Blink	Green	SwitchLOK interface
Continuous	Green	SwitchLOK
Continuous	Red	SwitchLOK

Managing SwitchLok Cords

	RU	ID	Friendly Name
00 C0 B7 9E 22 36	29	1B	BAE SYSTEMS, DELL R730, INSTALLED: 4/10/20 DR18 S. FLYNN
00 C0 B7 9E 22 36	Enter	Enter	Enter
00 C0 B7 9E 22 36	Enter	Enter	Enter
00 C0 B7 9E 22 36	Enter	Enter	Enter
00 C0 B7 9E 22 36	Enter	Enter	Enter
00 C0 B7 9E 22 36	Enter	Enter	Enter
00 C0 B7 9E 22 36	Enter	Enter	Enter

Primary Redundant 45%

Enable Custom

Set Custom %

Manage SwitchLok

SwitchLok Master C

Master Switch: On/Off

Master Reboot:

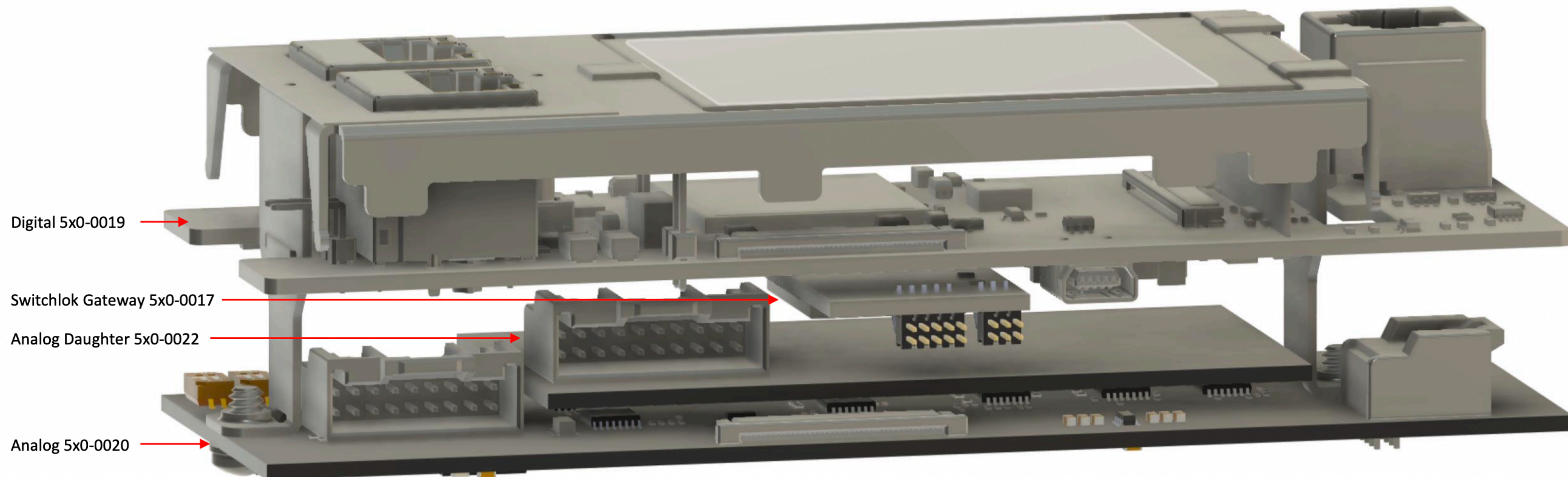
kVAh Reset:

New Products

Coming in 2023

- ▶ 2U Rack Mount PDUs
- ▶ 100A & 120A 3PH PDUs (to 69kW) w/Service Entrance Option
- ▶ PowerLOK Device Manager
- ▶ CE Models

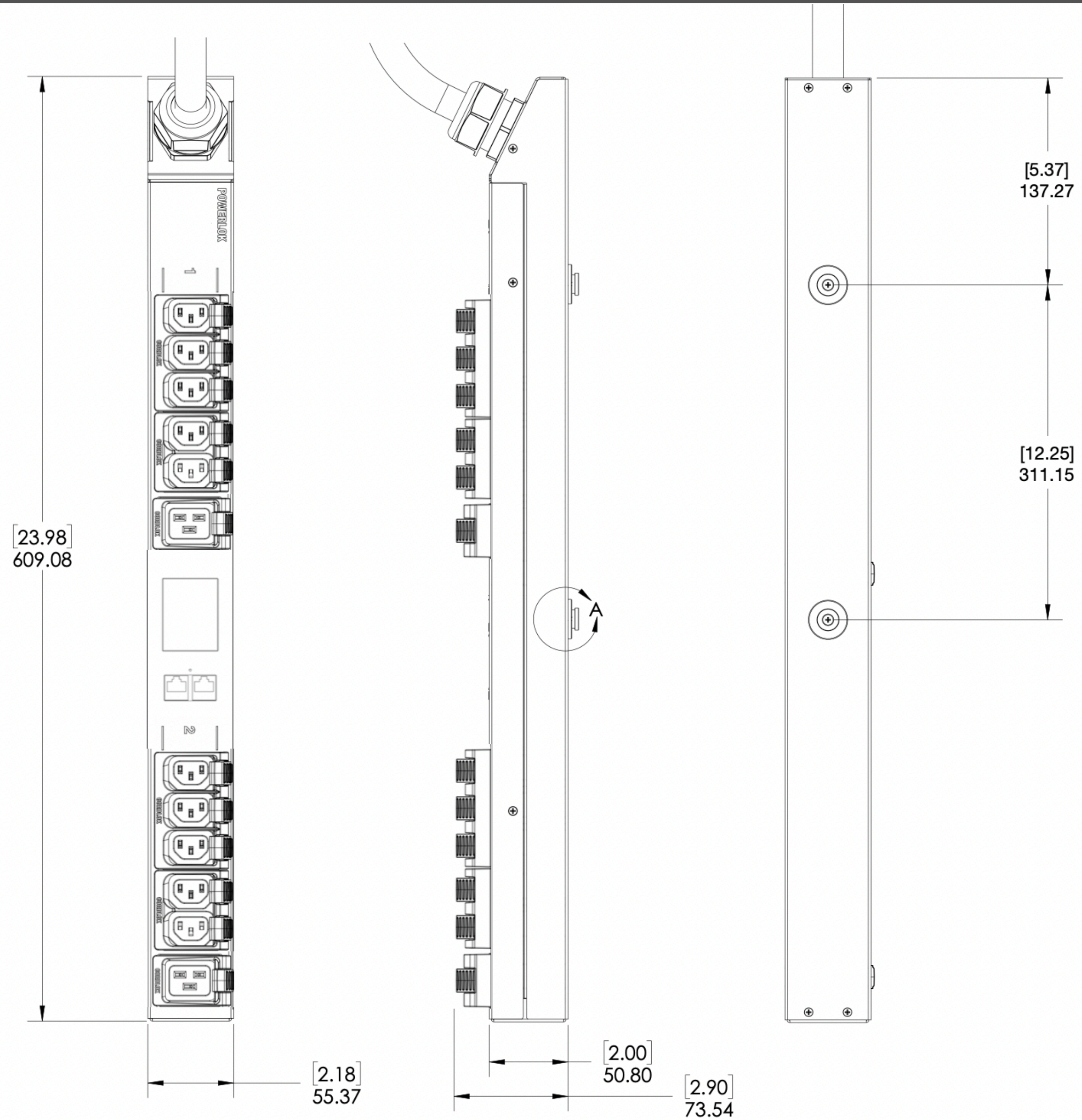
NEW DATA MODULE IN DEVELOPMENT



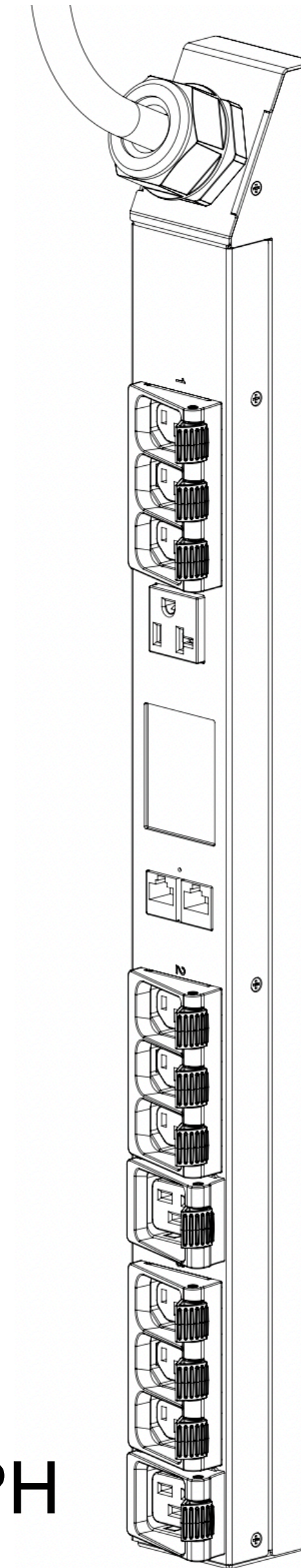
Monitoring circuits for 18-breakers in the same compact data module space.

2023 New Products - 24" Vertical Intelligent PDUs

208V 1PH

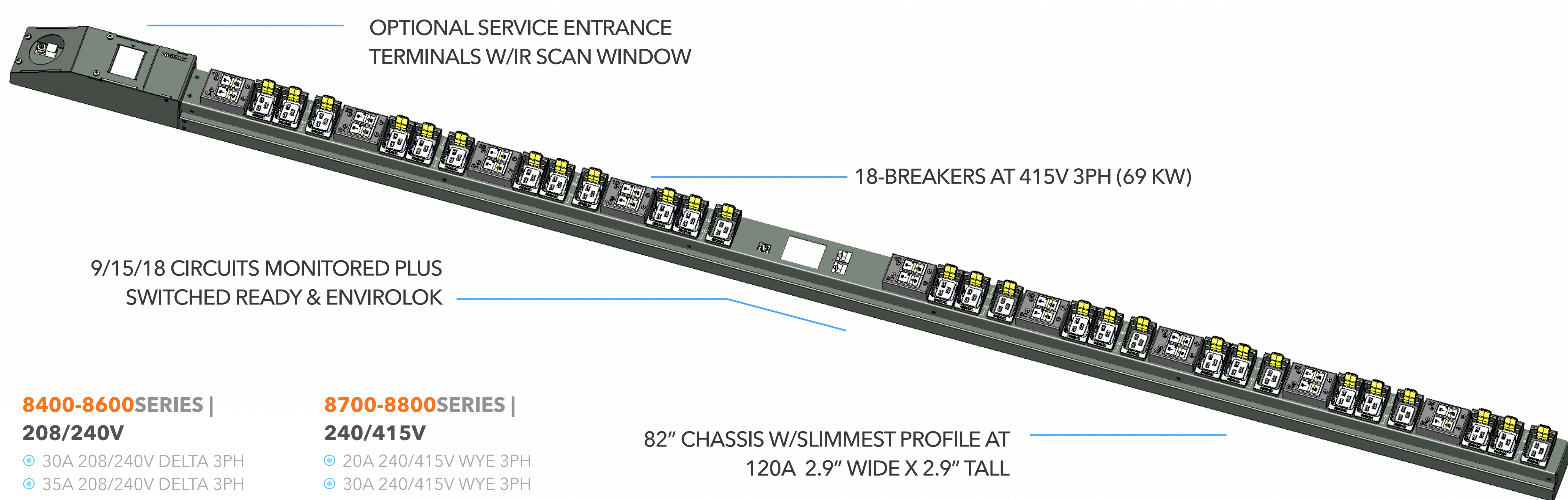


120/208V 3PH



2023 New Products - 100/120A 240/415V 3PH PDUs

100 & 120A PDUs with Service Entrance Option



OPTIONAL SERVICE ENTRANCE
TERMINALS W/IR SCAN WINDOW

18-BREAKERS AT 415V 3PH (69 KW)

9/15/18 CIRCUITS MONITORED PLUS
SWITCHED READY & ENVIROLOK

82" CHASSIS W/SLIMMEST PROFILE AT
120A 2.9" WIDE X 2.9" TALL

8400-8600 SERIES |

208/240V

- 30A 208/240V DELTA 3PH
- 35A 208/240V DELTA 3PH
- 50A 208/240V DELTA 3PH
- 60A 208/240V DELTA 3PH
- 80A 208/240V DELTA 3PH
- 100A 208/240V DELTA 3PH
- 120A 208/240V DELTA 3PH
- Up to 34 kW's

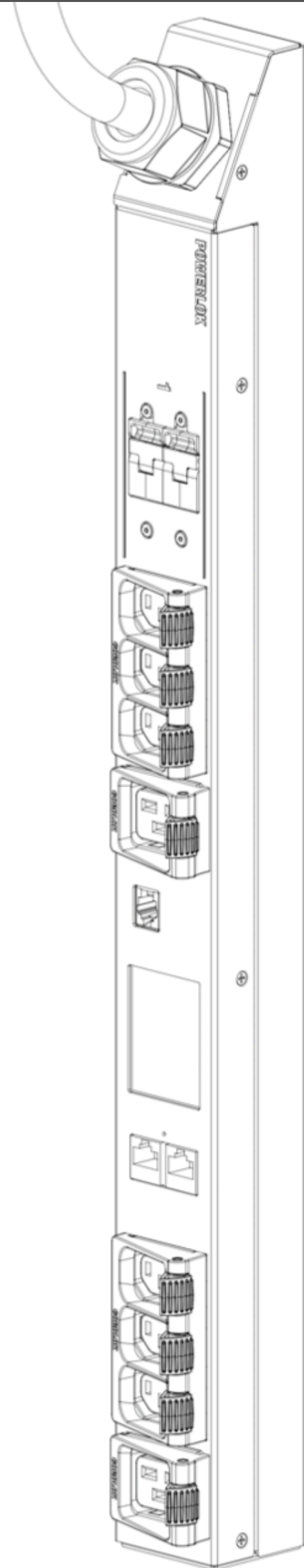
8700-8800 SERIES |

240/415V

- 20A 240/415V WYE 3PH
- 30A 240/415V WYE 3PH
- 60A 240/415V WYE 3PH
- 100A 240/415V WYE 3PH
- 120A 240/415V WYE 3PH
- Up to 69 kW's

Sales Demo Kit

Fully functional 24" rPDU in production packing plugs into 120V



DEMO KIT INCLUDES	Item Number, Description
DEMO KIT MODEL	PL8KIT24-01, RACK PDU DEMO UNIT WITH SWITCHLOK AND ENVIROLOK UNITS IN DISPLAY PACKAGING
INCLUDES (1) OF EACH	
RACK PDU DEMO UNIT	PL8DEMO24-01, RACK PDU DEMO, SWITCHED READY, 24", 20A 120V 1PH, 6-C13 & 2-C19, 4FT WHIP, 5-15P, CARBON, CORDLOK
SWITCHLOK MODEL	SL1300SM, SWITCHLOK, OUTLET SWITCHING AND METERING, C13-C14, 5FT
ENVIROLOK MODEL	EL2001, ENVIROLOK TEMPERATURE + HUMIDITY PDU SENSOR (2) PODS A-B, (2) 6 FT RJ12 CORDS
PDU 24" DEMO CARTON	730-0006, CARTON, MULTI-PACK-2 RACK PDU
PDU DEMO PACKING FOAM	730-0101, PACKING, FOAM, MULTI-PACK-4 RACK PDU

Selling POWERLOK - What to Know

20 Minutes

POWER (is easy)

- ▶ rPDUs
- ▶ Powering I.T.
- ▶ rPDU Types
- ▶ Mounting
- ▶ Input Power & Plugs
- ▶ Output receptacles

30 Minutes

POWERLOK

- ▶ Capability & Reliability
- ▶ Finding a rPDU
- ▶ Environment Sensors
- ▶ Switching Cords
- ▶ New Products
- ▶ Sales Demo Kits

20 Minutes

COMPETITORS

- ▶ Summary table
- ▶ Reliability
- ▶ Monitoring
- ▶ Cord locking
- ▶ Delivery

Competitors

See: POWERLOK Advantage - Competitive Compare & Objections

POWERLOK ADVANTAGE

Advanced Technology Delivered with a Fast-Response

	PowerLOK	APC	Servertech	Vertiv
RELIABILITY	X			
DELIVERY	X	X		X
PDU SIZE	X		X	
PDU COLOR	X			X
CORD LOCKING	X		X	

Competitors Reliability

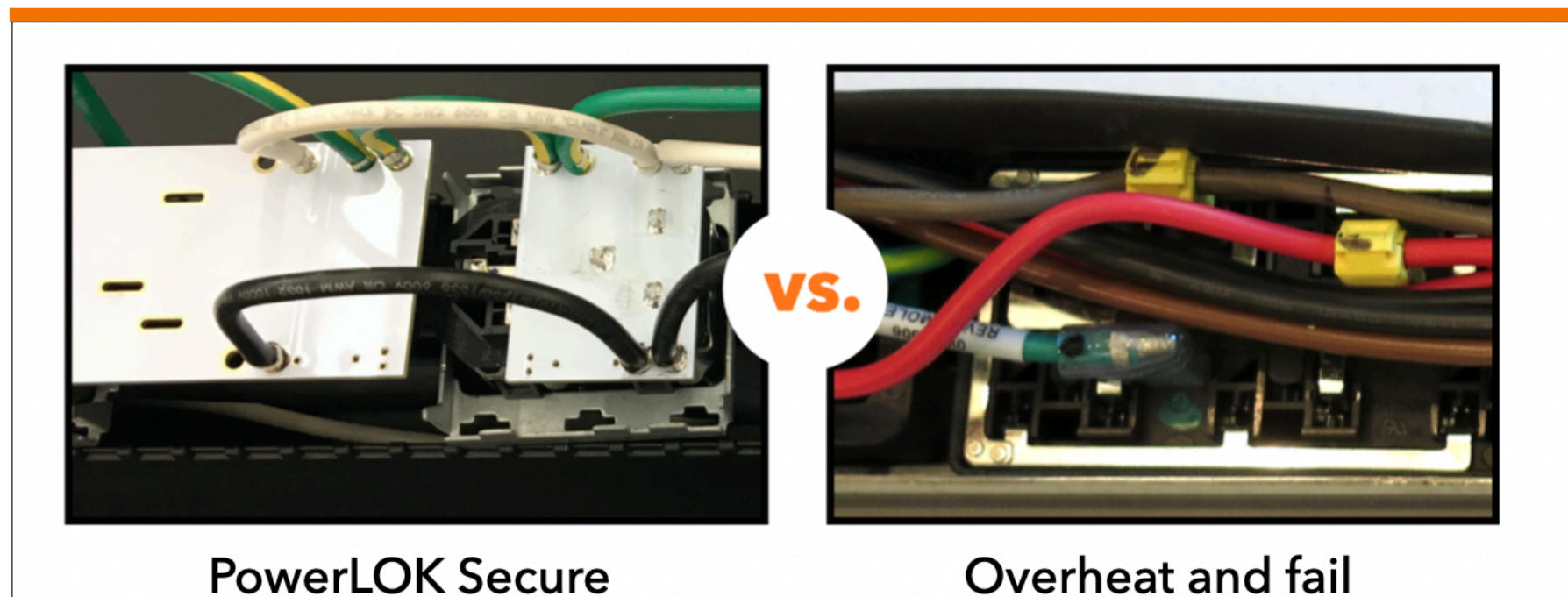
POWERLOK ADVANTAGE

3X less likely to fail due to 100% robotically soldered connections - critical for high power application.

RELIABILITY

PowerLOK	APC	Servertech	Vertiv
<ul style="list-style-type: none"> < 100% robotically soldered* < Made in USA 	<ul style="list-style-type: none"> < 70+ push-on, IDC and rivets < Made in India 	<ul style="list-style-type: none"> < Uses push on connections < Some models made off-shore 	<ul style="list-style-type: none"> < Uses push on connections < Made in the USA

* Independently evaluated by mtechnology to be 270% less likely to experience power connection failure over models with push-on and insulation displacement connectors.



Competitors Monitoring

ADVANTAGE POWERLOK

Industry leading accuracy, all touchscreen display, and internal temperature monitoring

MONITORING ACCURACY

	PowerLOK	APC	Servertech	Vertiv
	< Voltage: 0.5% < Current: 0.5% above 1A 1.0% below 1A	< Voltage & Current: +/- 1%	< Voltage & Current: +/- 1%	< Voltage & Current: +/- 1%
	< Advanced monitoring < Touchscreen display < PDU internal temp. monitoring < Not replaceable	< Advanced monitoring < LCD and push-buttons < Poor visibility < Not replaceable	< Advanced monitoring < LED and push-buttons < Poor visibility, lacks information < Replaceable on limited models	< Advanced monitoring < LED and push-buttons < Poor visibility, lacks information < Replaceable
	< Daisy chain capability < Ethernet 10/100 Mbps.	< Daisy chain capability < Ethernet 10/100 Mbps.	< Daisy chain capability < Ethernet 10/100/1000 Mbps.	< Daisy chain capability < Ethernet 10/100 Mbps.

FEATURES

NETWORK CAPABILITY



PowerLok



APC



SeverTech



Vertiv

Competitors Cord Locking

ADVANTAGE POWERLOK

Uses standard cords and does not sacrifice receptacle density. Clicks when LOCKED in place - single hand insertion and removal.

CORD LOCKING

PowerLOK	APC	Servertech	Vertiv
<ul style="list-style-type: none"> < Using your cords < \$1 per receptacle 	<ul style="list-style-type: none"> < Using APC cords < \$20/\$35 per cord (C13/C19) 	<ul style="list-style-type: none"> < Using your cords on some models < Moderate cost 	<ul style="list-style-type: none"> < Using your cords < Moderate cost



PowerLok
(CordLok)



APC
(Cord Kit)



SeverTech
(SecureLock)



Vertiv
(U-Lock)

Competitors Delivery

POWERLOK ADVANTAGE

Rapid build to order in the USA for over 1400 models in 3-5 weeks. 70+ models with 1-2 week delivery, no minimum.

DELIVERY

PowerLOK	APC	Servertech	Vertiv
< 70+ Models in 1-2 weeks < 1400+ Models in 3-5 weeks	< Limited models in distribution	< Varies often	< Varies often

MOST ADVANCED RPDU SELECTOR

Select a PDU Enter Model Number

PowerLok PDUs are built to order. Choose a category based on your delivery and feature requirements. For additional details refer to a product data sheet.

Fast Response Models (1-2 weeks)
 Select Models (3-5 weeks)
 Build Models (8-10 weeks)
48 Minimum PDU Order

PDU Type


Voltage Series

Amperage

PDU Length

PL8608S-10C 3

Rack PDU, Switched Ready, 72", 60A 208/240V 3PH (17.2 kW), 24-C13, 12-C19, 10FT Whip, IEC 309 (IP44), Carbon, CORDLOK



Example image shown. See specification for actual receptacle count.

QTY:

Results: Select model below to access product page

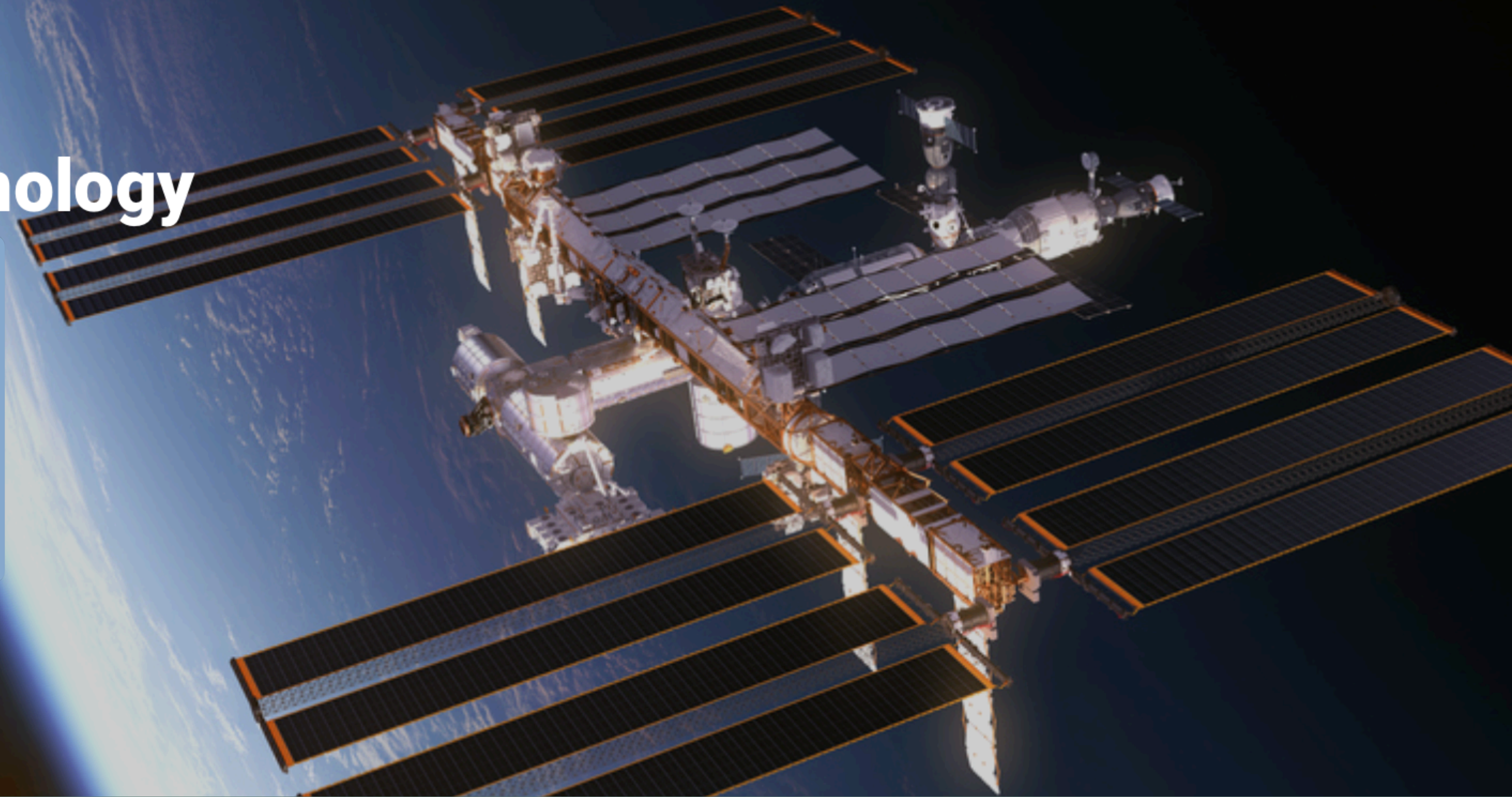
RACK PDU, SWITCHED READY, 72", 60A 208/240V 3PH (17.2 KW), IEC 309 (IP44), CORDLOK 2

Receptacle Group	CARBON		RED		WHITE		BLUE	
	6 FT Whip	10 FT Whip	6 FT Whip	10 FT Whip	6 FT Whip	10 FT Whip	6 FT Whip	10 FT Whip
42-C13	PL8606S-06C	PL8606S-10C	PL8606S-06R	PL8606S-10R	PL8606S-06W	PL8606S-10W	PL8606S-06B	PL8606S-10B
36-C13	PL8601S-06C	PL8601S-10C	PL8601S-06R	PL8601S-10R	PL8601S-06W	PL8601S-10W	PL8601S-06B	PL8601S-10B
36-C13 & 6-C19	PL8607S-06C	PL8607S-10C	PL8607S-06R	PL8607S-10R	PL8607S-06W	PL8607S-10W	PL8607S-06B	PL8607S-10B
24-C13 & 6-C19	PL8602S-06C	PL8602S-10C	PL8602S-06R	PL8602S-10R	PL8602S-06W	PL8602S-10W	PL8602S-06B	PL8602S-10B
24-C13 & 12-C19	PL8608S-06C	PL8608S-10C	PL8608S-06R	PL8608S-10R	PL8608S-06W	PL8608S-10W	PL8608S-06B	PL8608S-10B
18-C13 & 18-C19	PL8609S-06C	PL8609S-10C	PL8609S-06R	PL8609S-10R	PL8609S-06W	PL8609S-10W	PL8609S-06B	PL8609S-10B
30-C19	PL8621S-06C	PL8621S-10C	PL8621S-06R	PL8621S-10R	PL8621S-06W	PL8621S-10W	PL8621S-06B	PL8621S-10B

Automated build-to-order PDUs made in the USA

Advanced PDU technology

- ◉ Slimmest profiles
- ◉ Reliable locking using your cords
- ◉ 0.5% monitoring accuracy
- ◉ Scalable switching technology
- ◉ Advanced temp/humidity sensors
- ◉ Colors at no additional cost



Thank You!

Advanced Technology Delivered with a Fast-Response.



POWERLOK Software

For Power & Environmental Monitoring and Switching

Ethernet Communication

The Rack PDU is equipped with two RJ45 10/100Base-T Ethernet ports to attach to an existing local area TCP/IP network. This connection allows access to the Rack PDU via a web browser or SNMP manager. The two RJ45 connectors that are bidirectional; therefore, the user can connect to either port to set up the PDU on the network. 12 PDUs can be connected in series by daisy chaining.

PDU Addressing Modes

The Rack PDU supports the following methods of IPv4 addressing:

Mode	Description	Comment
Linked local	IPv4 link-local addresses are assigned to address block 169.254.0.0 - 169.254.255.255	This addressing mode supports attaching a host PC/laptop directly to the Rack PDU without requiring a switch, router or DHCP server.
DHCP	The Rack PDU network configuration is provided by the DHCP server.	The local touchscreen display will publish the IP address assigned to the Rack PDU by the DHCP server.
Static IP	Default PDU network configuration IP address: 192.168.1.254 Subnet Mask: 255.255.255.0 Gateway: 192.168.1.1	The static IP can be changed using the web browser.

The Rack PDU supports the following methods of IPv6 addressing:

Mode	Description	Comment
SLAAC	StateLess Address Auto Configuration. The PDU sends a request to the router for a prefix, then uses it's own MAC address and prefix to generate an IP address.	Router must be capable of Router Advertisements. Alternatively, an independent router advertisement daemon on the network may respond to the PDU while in SLAAC mode. For Linux boxes, refer to 'RADVD'
Static	Default 2603:6011:8904:9900:7a:491d:dc1a:f074, Prefix 2603:6011:8904:9900, 48 bit length	IPv6 address field takes the full address including prefix. This address may be changed in the web browser.

Settings

IPv4 Addressing Mode

Linked Local
 DHCP
 Static IP

IP Address
 IPv4 DNS Servers
 Subnet Mask
 Primary DNS
 Default Gateway
 Secondary DNS

IPv6 Addressing Mode Enable

IP Addresses: FE90::2D0:B8EE:ETC6:653C
 FE90::2D0:B8EE:ETC6:653C


SLAAC
 Static

IP Address
 Primary DNS
 Prefix
 Secondary DNS
 Prefix Length
 Default Gateway

POWERLOK Software

For Power & Environmental Monitoring and Switching

Real time plus historical graphing



Rating: 20A 208V 3PH Friendly Name: RACK D112-A PD

PowerLok
SwitchLok
EnviroLok
Admin ▾

PowerLOK Summary

Levels NOW

TOTAL kW / kVA	7.54 / 8.54
INTERNAL TEMP	41°C
SENSOR A TEMP / Rh	72°F / 38%
SENSOR B TEMP / Rh	71°F / 37%
SENSOR C TEMP / Rh	68°F / 35%
SENSOR D TEMP / Rh	95°F / 42%

GROUP AMPS	1	12.2
	2	10.3
	3	10.8

LINE AMPS	A	22.2
	B	20.3
	C	20.8

GROUP kW / kVA	1	2.51 / 2.63
	2	2.42 / 2.58
	3	2.54 / 2.64

LINE kW / kVA	A	3.20 / 3.33
	B	3.31 / 3.45
	C	3.83 / 3.88

GROUP PF / VOLTS	1	0.98 / 208
	2	0.97 / 207
	3	0.94 / 207

LINE PF	A	0.98
	B	0.97
	C	0.94

PowerLok Historical Graphs / Log

Levels over past two week period

TOTAL kW / kVA ▾
GROUP kW / kVA ▾
GROUP AMPS ▾
GROUP PF / VOLTS ▾

PEAK

5.94 kW

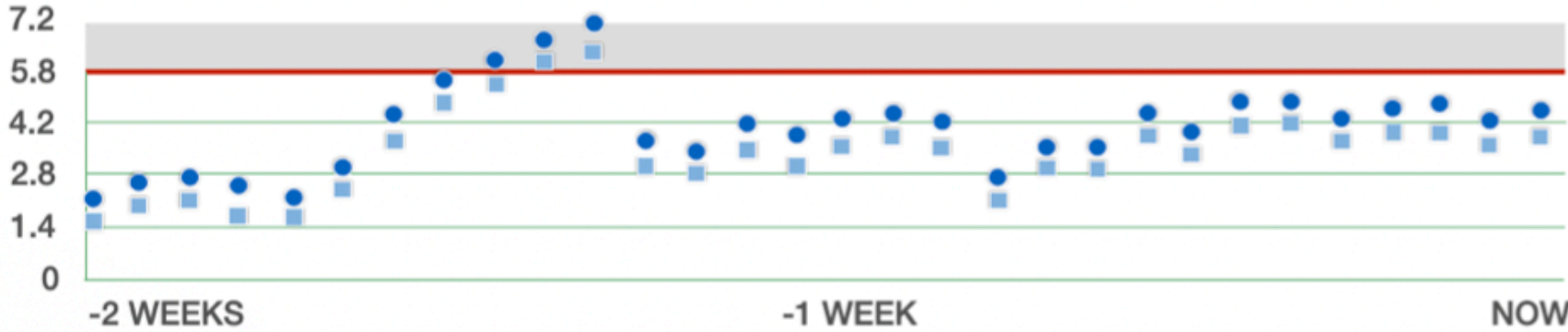
9.45 kVA

NOW

5.76 kW

5.54 kVA

Time Interval: 8 hrs.



-2 WEEKS
-1 WEEK
NOW

INTERNAL PDU TEMP

PEAK

45C

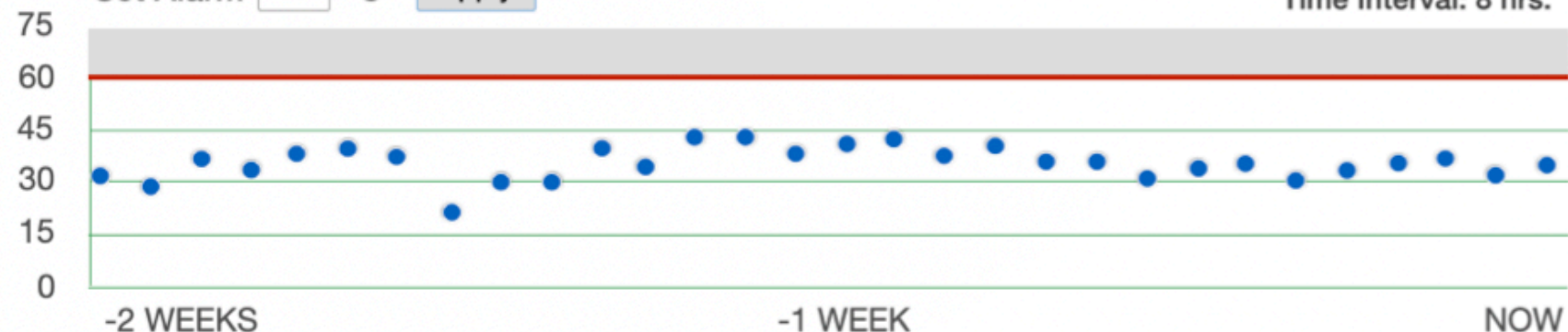
NOW

41C

Time Interval: 8 hrs.

○ Fahrenheit
● Celsius

Set Alarm °C



-2 WEEKS
-1 WEEK
NOW

PowerLok Settings ▾

Amperage Alarm Setting

Primary Only 80%

Primary Redundant 40%

Primary Redundant 45%

Enable Custom

Set Custom %

Manage SwitchLok ⓘ

SwitchLok Master Control ▾

Master Switch: ⓘ

On/Off

Master Reboot: ⓘ

kVAh Reset: ⓘ

Start Delay (s): ⓘ

Sequence Delay (s): ⓘ

Off-On Delay (s): ⓘ

Utility Apply Delay (s): ⓘ

Sequence Actions Explained ▾

Events

2021-10-14 3:40 PM Line A Over-current cleared (34.5%, 40%)

Software version: 2.1.0 PowerLok 2021 All Rights Reserved.

POWERLOK Software

For Power & Environmental Monitoring and Switching

Real time plus historical graphing

POWERLOK Rating: 20A 208V 3PH Friendly Name:

PowerLOK Summary

Levels NOW

TOTAL kW / kVA	7.54 / 8.54
INTERNAL TEMP	41°C
SENSOR A TEMP / Rh	72°F / 38%
SENSOR B TEMP / Rh	71°F / 37%
SENSOR C TEMP / Rh	68°F / 35%
SENSOR D TEMP / Rh	95°F / 42%

GROUP AMPS	1	12.2
	2	10.3
	3	10.8
LINE AMPS	A	22.2
	B	20.3
	C	20.8

GROUP kW / kVA	1	2.51 / 2.63
	2	2.42 / 2.58
	3	2.54 / 2.64
LINE kW / kVA	A	3.20 / 3.33
	B	3.31 / 3.45
	C	3.83 / 3.88

GROUP PF / VOLTS	1	0.98 / 208
	2	0.97 / 207
	3	0.94 / 207
LINE PF	A	0.98
	B	0.97
	C	0.94

PowerLOK Historical

Levels over past two weeks

TOTAL kW / kVA

PEAK 5.94 kW 9.45
NOW 5.76 kW 5.54

INTERNAL PDU TEMP

PEAK 45C
NOW 41C

Set Alarm 60 °C

Admin section of the web browser

Admin ▾

Network Admin

PDU Friendly Name:

Model Number: PL8204D-10C MAC Address: 70-B3-D5-A7-0F-AC
 Serial Number: 20USK15190001 Port Speed: 100 Mbps
 Firmware Version: 0.0.3.rc02 Hardware Version: 1.1.2

FTP Enabled

Settings

IPv4 Addressing Mode

Linked Local DHCP Static IP

IP Address **IPv4 DNS Servers**
 Subnet Mask Primary DNS
 Default Gateway Secondary DNS

IPv6 Addressing Mode Enable

IP Addresses: FE90::2D0:B8EE:ETC6:653C
 FE90::2D0:B8EE:ETC6:653C

SLAAC Static

IP Address Primary DNS
 Prefix Secondary DNS
 Prefix Length Default Gateway

Time Servers

NTP MON, 11 OCT 2021 3:28:40 PM EDT

Web Access Settings

Enable HTTP Port: AUTO
 Enable HTTPS Port: FE90::2D0:B8EE:ETC6:653C

Enabled when HTTPS is enabled

Lok Settings ▾

Alarm Setting

Only 80%
 Instant 40%
 Instant 45%
 Custom
 Custom %

SwitchLok ⓘ

Lok Master Control ▾

Switch: ⓘ

boot: ⓘ

set: ⓘ

ⓘ
 ⓘ
 ⓘ
 ⓘ

Actions ▾

10-14 3:40 PM Line A Over-current
 (34.5%, 40%)

POWERLOK Software

For Power & Environmental Monitoring and Switching

Real time plus historical logs

Rating: 20A 208V 3PH Friendly Name: RACK D112-A PD

PowerLok
SwitchLok
EnviroLok
Admin ▾

PowerLOK Summary

Levels NOW

TOTAL kW / kVA	7.54 / 8.54
INTERNAL TEMP	41°C
SENSOR A TEMP / Rh	72°F / 38%
SENSOR B TEMP / Rh	71°F / 37%
SENSOR C TEMP / Rh	68°F / 35%
SENSOR D TEMP / Rh	95°F / 42%

GROUP AMPS	1	12.2
	2	10.3
	3	10.8
LINE AMPS	A	22.2
	B	20.3
	C	20.8

GROUP kW / kVA	1	2.51 / 2.63
	2	2.42 / 2.58
	3	2.54 / 2.64
LINE kW / kVA	A	3.20 / 3.33
	B	3.31 / 3.45
	C	3.83 / 3.88

GROUP PF / VOLTS	1	0.98 / 208
	2	0.97 / 207
	3	0.94 / 207
LINE PF	A	0.98
	B	0.97
	C	0.94

PowerLok Historical Graphs / Log

Levels over past two week period

TEMPERATURE ▾

		A	B	C	D
NOV		82 F	62 F	82 F	106 F
TODAY	-00:00:10	82 F	62 F	82 F	106 F
TODAY	-00:00:20	82 F	62 F	82 F	106 F
TODAY	-00:00:30	82 F	62 F	82 F	106 F
TODAY	-00:00:40	82 F	62 F	82 F	106 F
TODAY	-00:00:50	82 F	62 F	82 F	106 F
TODAY	-00:01:00	82 F	62 F	82 F	106 F
.....				
-1 DAY	-00:00:10	82 F	62 F	82 F	106 F
-1 DAY	-00:00:20	82 F	62 F	82 F	106 F
-1 DAY	-00:00:30	82 F	62 F	82 F	106 F

Log Scale

- 10 sec.
- 1 min.
- 10 min.
- 30 min.
- 1 hr.
- 8 hr.
- 1 day

HUMIDITY (Rh) ▾

		A	B	C	D
NOW		38	35	38	32
TODAY	-00:00:10	38	35	38	32
TODAY	-00:00:20	38	35	38	32
TODAY	-00:00:30	38	35	38	32
TODAY	-00:00:40	38	35	38	32
TODAY	-00:00:50	38	35	38	32
TODAY	-00:01:00	38	35	38	32
.....				
-1 DAY	-00:00:10	38	35	38	32
-1 DAY	-00:00:20	38	35	38	32
-1 DAY	-00:00:30	38	35	38	32

Log Scale

- 10 sec.
- 1 min.
- 10 min.
- 30 min.
- 1 hr.
- 8 hr.
- 1 day

PowerLok Settings ▾

Amperage Alarm Setting

Primary Only 80%

Primary Redundant 40%

Primary Redundant 45%

Enable Custom

Set Custom %

Manage SwitchLok ⓘ

SwitchLok Master Control ▾

Master Switch: ⓘ

Master Reboot: ⓘ

kVAh Reset: ⓘ

Start Delay (s): ⓘ

Sequence Delay (s): ⓘ

Off-On Delay (s): ⓘ

Utility Apply Delay (s): ⓘ

Sequence Actions Explained ▾

Events

✔ 2021-10-14 3:40 PM Line A Over-current cleared (34.5%, 40%)