



LAYERZERO
POWER SYSTEMS, LLC.

The Foundation Layer

Series 70 eRPP-SL2

High-Density Slim Remote Power Panel



Product Brochure

eRPP-SL2 Facilitates High-Density Distribution With 336 Poles In Two Tiles

Make The Most of Available Data Center Space

The SL2 is designed to maximize white space, supporting up to 336 poles within just two floor tiles. It offers flexible configuration options, including floor-mounted, wall-mounted, side-by-side, and back-to-back installations, with the option to access both sides. Safety is built in through the finger-safe SafePanel® panel board with no exposed live parts. The eRPP-SL2 also includes LayerZero DPQM, providing advanced power quality monitoring with real-time waveform capture. For facilities looking to optimize critical space while maintaining the highest levels of reliability, the eRPP-SL2 is an ideal choice.



Reliability



Silver Plated Terminals:
Silver Has Excellent Conductivity To Provide Superior Electrical Performance and Reliability



Convection Cooling:
Natural Convection-Cooled Heat Dissipation System is Maintenance-Free



Machined Hardware:
Machined Cap Screws and Engineered Disc Springs Maintain Constant Torque Throughout Product Life



Selective Trip Coordination:
Main Breaker Will Not Trip In The Event of a Downstream Fault.



Serialized Critical Board Tracking:
Critical Boards Are Serialized And Cataloged in an Active Database For Traceability

Safety



INSIGHT IR® Cameras:
Built-in Infrared Cameras to Continuously Scan Bolted Connections For Irregular Rises In Temperature



Sectionalized Components:
Separations Between Each Section To Maintain Maximum Operator Safety



Polycarbonate Windows:
Allows Critical Board LEDs To Be Viewed With The Dead-Front Door Closed



Guided Wireways:
Helps Keep Wires Organized



Dead Front Hinged Doors:
Barrier To Provide A Safe Working Area With No Exposed Live Parts



SafePanel® Distribution:
IP-20 Rated Finger-Safe Panel Board with No Exposure to Exposed Live Parts

Connectivity

Ethernet Connectivity:
Secure VPN Router Connects To Network For Advanced Remote Monitoring Capabilities

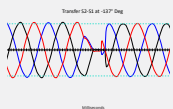
Modbus/TCP:
Open Connectivity to Existing Monitoring Systems Without Proprietary Limitations

NTP Time Clock Synchronization:
Facilitates Timeline-Based Logging For Post-Event Reconstruction

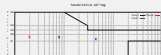
SNMP Connectivity:
Permits Remote Management Via Simple Network Management Protocol

Dry Contacts:
Access Alarms Data with Dry Contacts Connections

Power Quality Monitoring



Real-Time Waveform Capture:
Automatically Captures A Picture Of The Power Six-Cycles Before and After Every Event

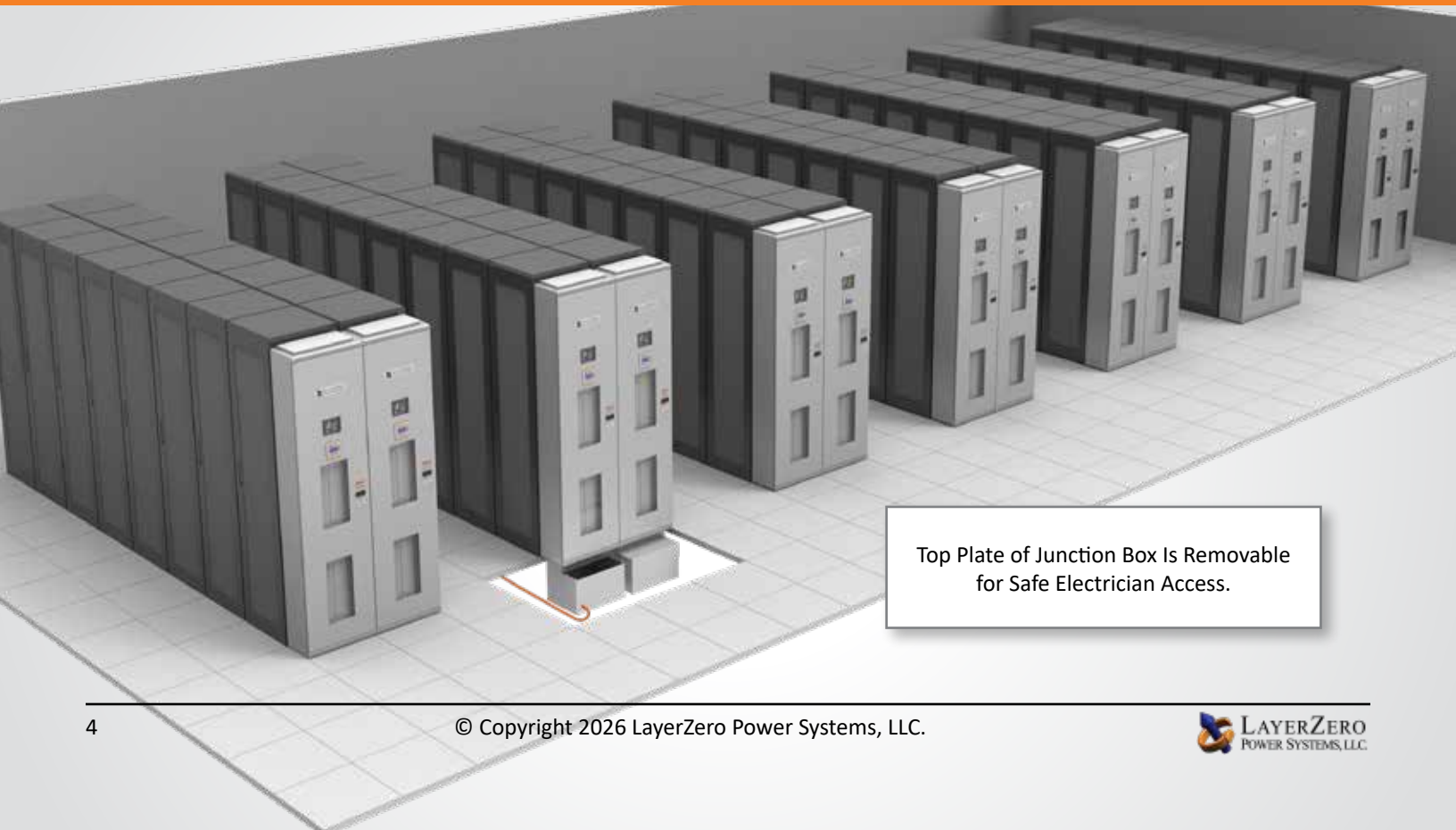
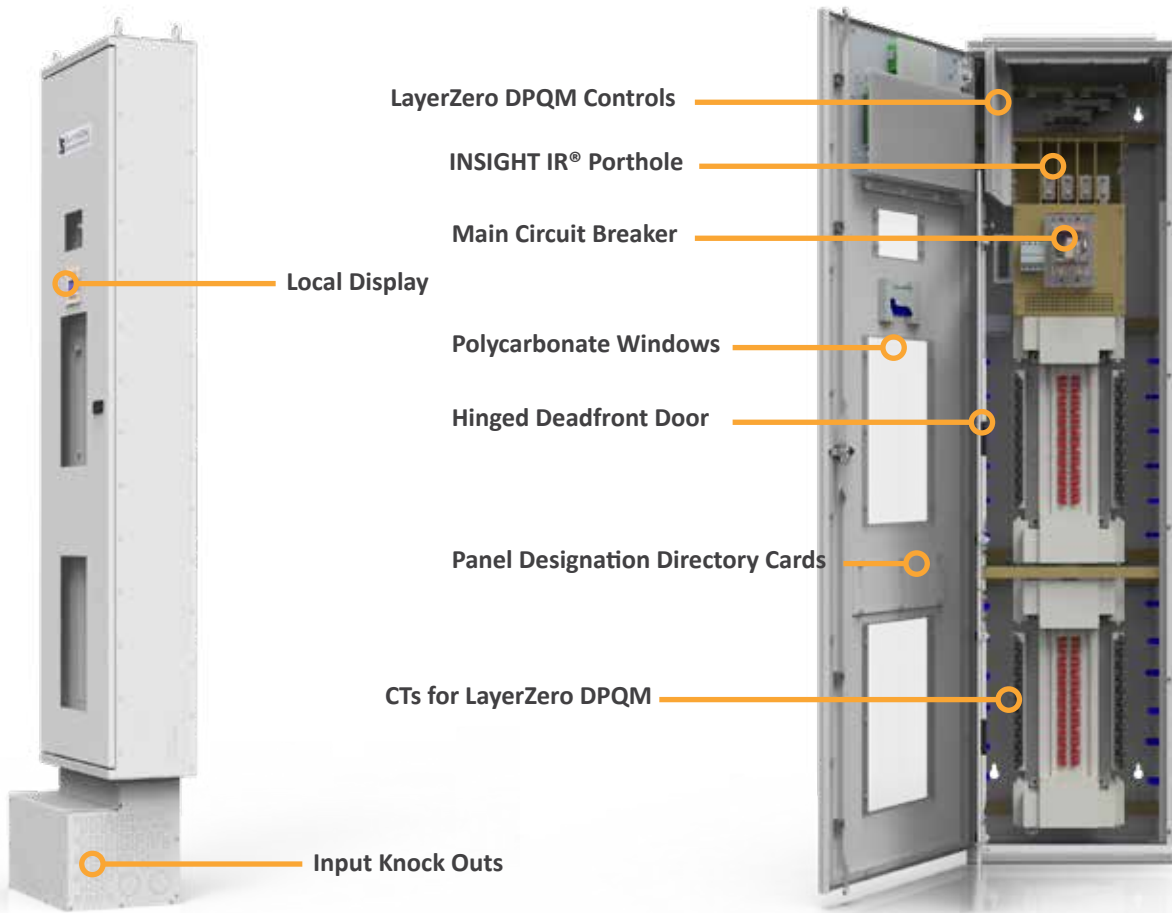


ITIC Plotting:
Generate ITIC Plots To Determine if Connected Equipment Was Affected by Power Quality Events



Optional Local Touch-Screen Interface:
Password-Protected Color Touch-Screen GUI For Local STS Setup/Operation/Administration

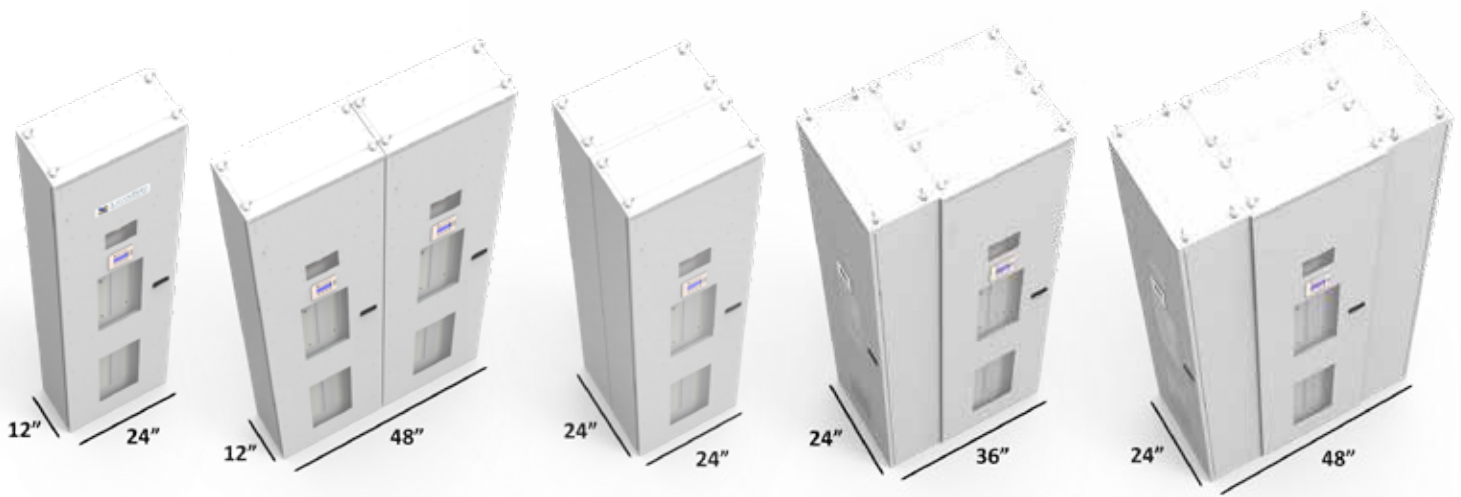
Equipment Layout



Mounting Configurations

Flexible Mounting Options

The SL2 can be free-standing or wall-mounted, with feeder cables located below the tile. Its design supports a wide range of configurations to maximize efficiency in critical facility layouts, accommodating up to 336 poles within two data center tiles.



Single

- Half Tile
- Wall or Floor Mounted

Side-By-Side

- 2X Half Tile
- Wall or Floor Mounted

Back-To-Back

- Single Tile
- Floor Mounted

Back-To-Back + 1 Side

- Single Tile + Half Tile
- Floor Mounted

Back-to-Back + 2 Sides

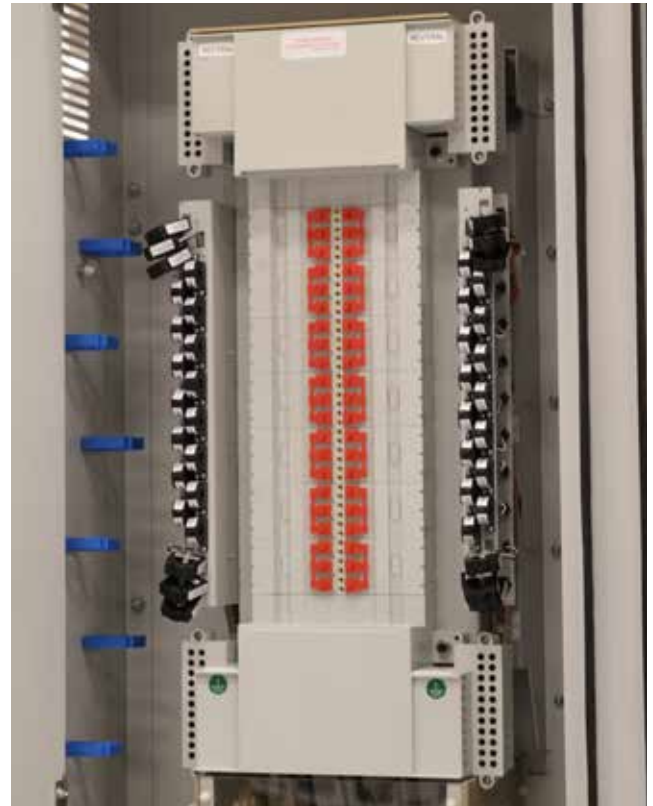
- Two Tiles
- Floor Mounted

Reliability Features

Selective Trip Coordination

LayerZero SL2 Remote Power Panels are designed with selective trip coordination.

This ensures that in the event of a downstream fault, branch circuit breakers isolate the issue without affecting the main breaker, preserving uptime and system stability.



The 42-Circuit Finger-Safe SafePanel® Panel Board



The Fault Current Opens the Solenoid Magnet, Causing The Contacts To Part



Unequal Pressure on Each Side of The Arc Causes the Plasma Wave To Rotate Away From The Contacts



The Plasma Wave is Driven into 12 Evenly Spaced Dividers



The Plasma is Rapidly Cooled



Transient Voltage Attempts To Re-Strike The Arc, But The Plasma Is Again Pushed Into The Dividers



When Sufficiently Cool, Charged Particles Recombine And The Fault Current Is Stopped Quickly & Safely

Ease of Maintenance

Scan Bolted Connections with Dead-Front Doors Closed

Strategically positioned IR-scan portholes enable safe thermal scanning of all bolted connections with the dead-front doors closed, eliminating operator exposure to circuit voltage.

The IR window swivels upward and unlocks with keyhole access to reveal a protective mesh, allowing operators to capture accurate thermal images. LayerZero also provides documentation to guide proper thermal scanning procedures.



INSIGHT IR® Porthole on eRPP-SL2

View Status LEDs and Distribution CB Positions With Dead-Front Doors Closed

The SL2 features polycarbonate viewing windows on the outer door, allowing operators to confirm both main and branch circuit breaker positions with the dead-front door closed.



Polycarbonate Windows on the LayerZero eRPP-SL2

Silver Plated Terminals

LayerZero utilizes silver plating on all bus joints to provide the highest performance. Silver offers high conductivity and low resistance, ensuring optimal electrical contact.



Silver-Plated Customer Connections

Machined Hardware

Bolted connections employ machined cap screws and engineered disc springs, creating a flat pressure-versus-deflection profile that maintains constant torque throughout the life of the product.

These technologies have been extensively tested across wide temperature ranges to ensure connections remain secure once tightened.



Machined Cap Screws and Engineered Disc Springs Utilized in LayerZero Power Systems Products

Serialized Circuit Boards

All critical circuit boards and memory cards are serialized and tracked through the eBOSS portal, allowing customers to reference the components used, who tested them, and review any associated test notes.

Serialized components enable predictive modeling for prospective failures, so any failed part can be cross-referenced with similar instances, supporting preventative maintenance and maximizing uptime.



All Critical Boards are Serialized and Tracked in a Database

Safety Features

Circuit Breaker Shrouds

The LayerZero SL2 Remote Power Panel offers optional circuit breaker shrouds to eliminate exposure to live parts. These patented shrouds cover exposed wiring, maximizing operator safety and reducing risk during operation and maintenance.

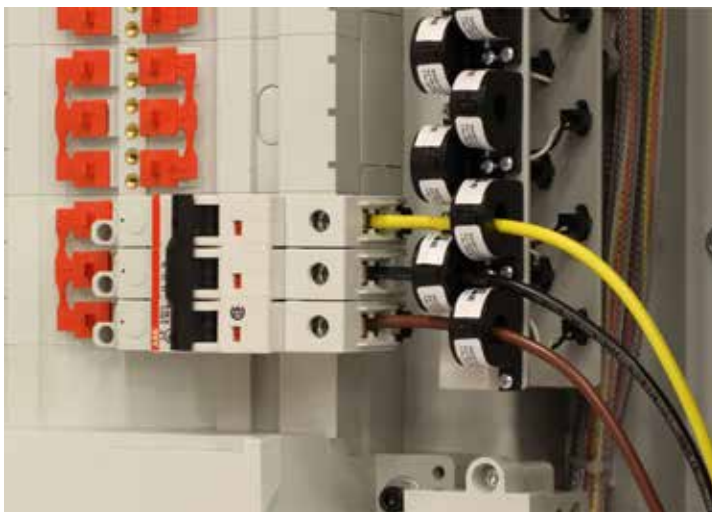


No Exposed Live Parts

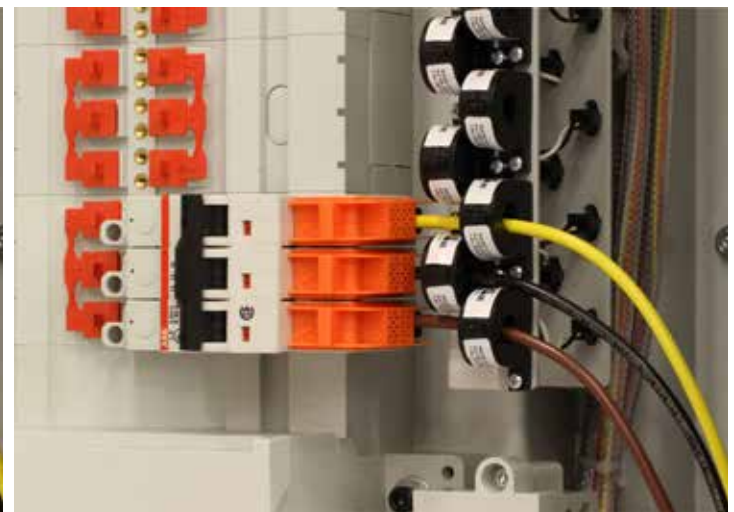
LayerZero's patented Circuit Breaker Shrouds cover exposed wiring, maximizing operator safety.



LayerZero's patented orange Circuit Breaker Shrouds



Wiring Without Shrouds Leaves Wiring Exposed



Circuit Breaker Shrouds Maximize Operator Safety

Safety Features

The LayerZero Finger-Safe SafePanel®

The SL2 features an IP-20-rated, finger-safe panel board that prevents ingress of a ½" (12.5mm) diameter probe, ensuring maximum operation protection.

During breaker removal, a potential arc between live conductors is contained within the connection well, keeping operations safe.

With deeply insulated components, removing a branch breaker is secure and straightforward.



Isolated, Non-Conducting Brass Screws



The Protective Cover Is Removed



The Breaker Is Inserted Into The Opening



The Breaker Snaps Into The DIN Rail



The Breaker Is Secured With An Isolated, Non Conducting Screw

Power Quality Monitoring

LZ DPQM

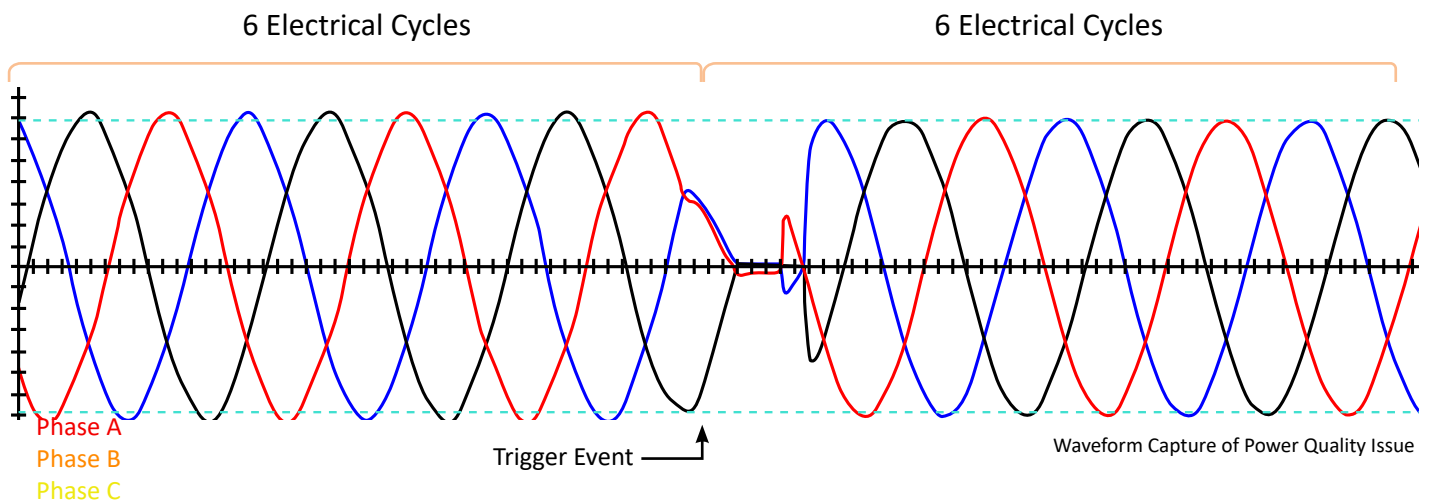
The SL2 is equipped with LayerZero DPQM (Distribution Power Quality Monitoring), an all-encompassing monitoring system with both local and remote communications options.

From basic monitoring and alarm reporting to advanced power quality analysis, DPQM helps facilities stay aware, vigilant, and proactive in maintaining a safe, stable, and reliable operation.



LayerZero DPQM Provides Answers

LayerZero DPQM captures timestamped waveforms before and after events, enabling facilities to review and identify the root causes of issues. Power quality information is actively collected at the STS, PDU, and RPP, allowing thorough post-event analysis.



Technical Specifications



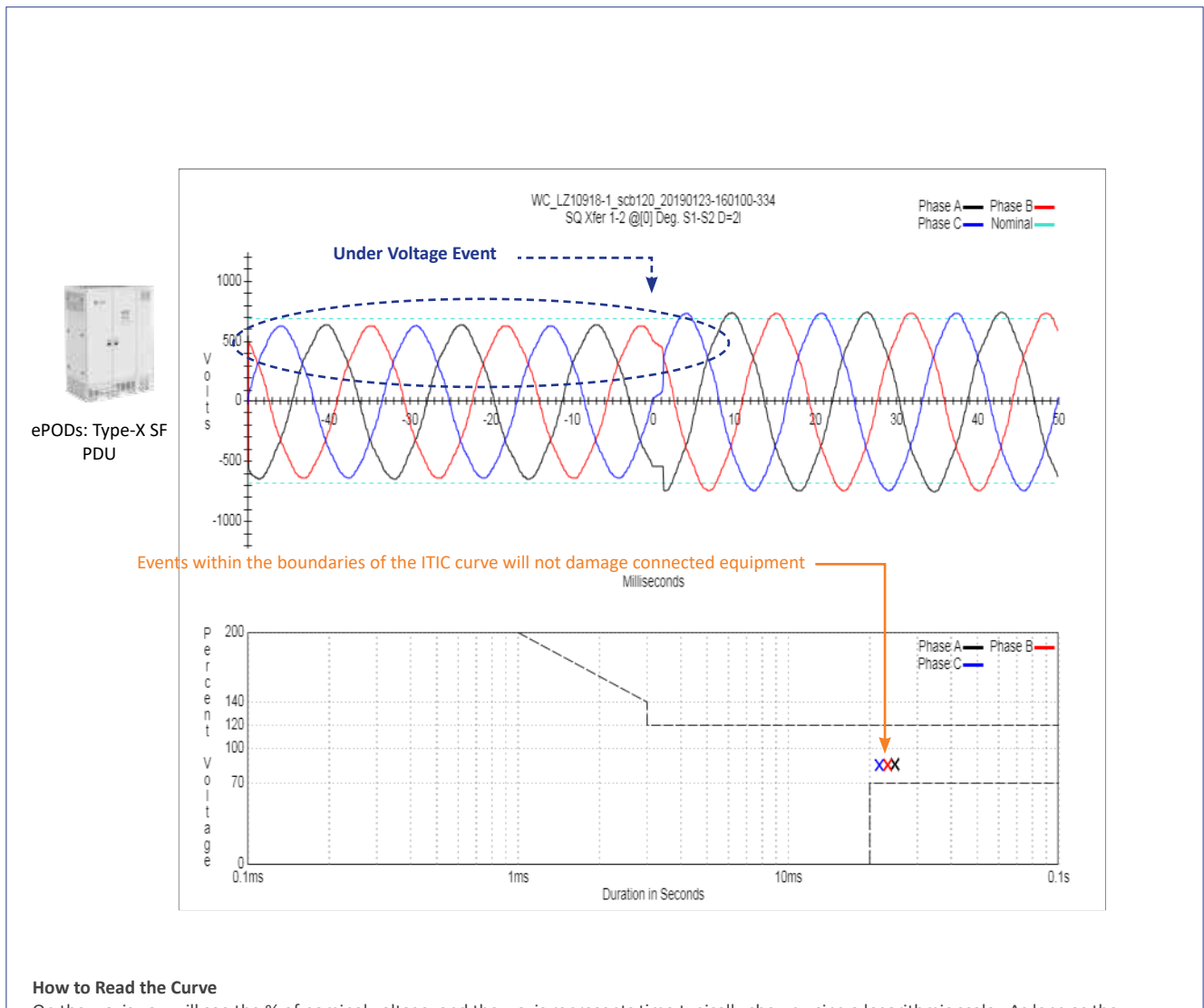
LayerZero DPQM Parameters		Mains	Subfeeds or Branch Circuits
Voltage Monitor	Volts (L-L) Phase A/B/C (volts RMS)	✓	
	Volts (L-N) Phase A/B/C (volts RMS)	✓	
	Phase Rotation	✓	
Current Monitor	CT Reversed Phase A/B/C/N	✓	✓
	Current Phase A/B/C/N (amperes RMS)	✓	✓
Power Monitor	Frequency (hertz)	✓	
	Real Power (kilowatts)	✓	✓
	Apparent Power (kilovolt-amperes)	✓	✓
	Reactive Power (kilovolt-amperes reactive)	✓	✓
	Power Factor	✓	✓
	Energy (kilowatt-hours)	✓	✓
	Block Demand (kilowatts)	✓	✓
	Block Demand Peak (kilowatts)	✓	✓
	Rolling Demand (kilowatts)	✓	✓
Power Quality	Percent VTHD (percent)	✓	✓
	Waveform Capture	✓	✓
Alarms	Phase - Under Voltage A/B/C (Alarm)	✓	
	Phase - Over Voltage A/B/C (Alarm)	✓	
	Phase - Low Voltage A/B/C (Warning)	✓	
	Phase - High Voltage A/B/C (Warning)	✓	
	Phase - Over Current A/B/C (Alarm)	✓	✓
	Phase - High Current A/B/C (Warning)	✓	✓
	Under Frequency (Alarm)	✓	
	Over Frequency (Alarm)	✓	
	High VTHD (Warning)	✓	
	Over VTHD (Alarm)	✓	
	Phase Rotation (Alarm)	✓	

All product specifications are subject to change without notice.

All LayerZero products sample power sources for quality monitoring, with data accessible remotely via a web browser.

For example, in a “voltage sag” factory test on a Series 70 ePODs: Type-X PDU, each phase is tracked over time. When voltages dropped below a setpoint, an undervoltage event was triggered, followed by automatic waveform capture and ITIC plotting.

On LayerZero PDUs and RPPs, waveforms and ITIC plots are generated for every phase, on every circuit, for every event.



How to Read the Curve

On the y-axis you will see the % of nominal voltage, and the x-axis represents time typically shown using a logarithmic scale. As long as the voltage is contained within the boundaries the load will be maintained and there will be no damage to connected equipment. The examples above events plotted both within the boundaries.

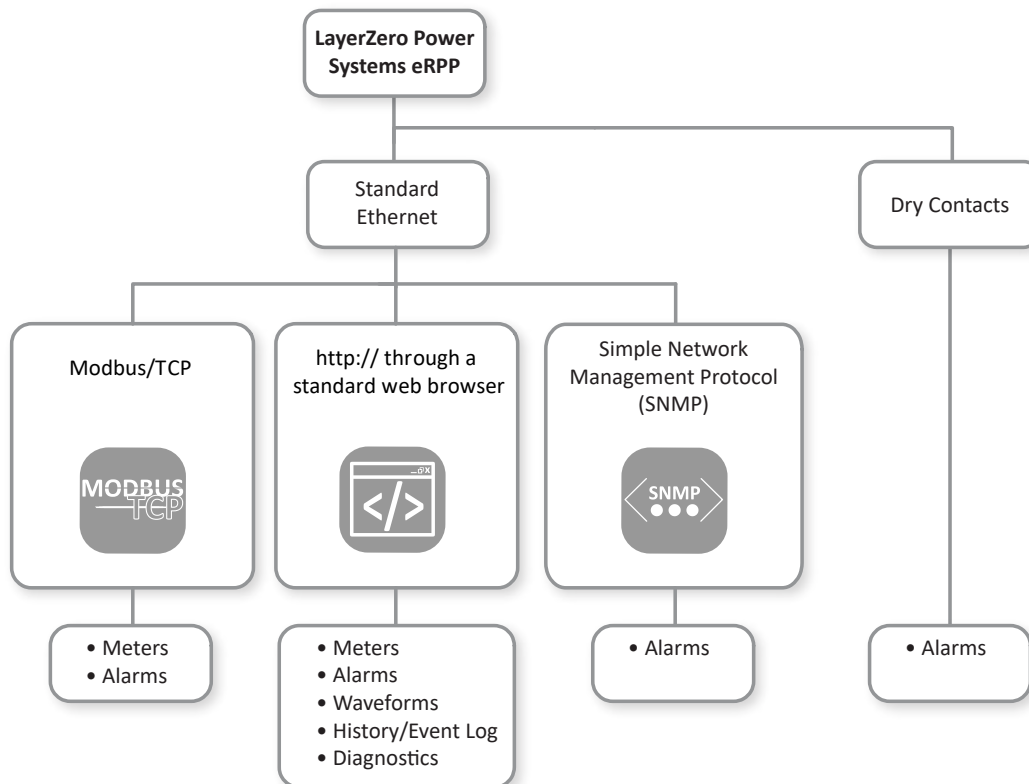
eRPP-SL2 Models with System Withstand Ratings	
120/208 V, 3-phase, 4-wire + Ground	35 kA
220/380 V, 3-Phase, 4-Wire + Ground	
230/400 V, 3-Phase, 4-Wire + Ground	14 kA
240/415 V, 3-Phase, 4-Wire + Ground	
277/480 V, 3-Phase, 4-Wire + Ground	
480 V, 3-Phase, 3-Wire + Ground	

Mechanical Characteristics	
Dimensions	24"W x 93"H x 12"D (610 mm x 2362 mm x 305 mm)
Weight	550 lbs (250 kg)
Enclosure Mounting	Free-Standing, Wall-Mounted
Mounting Clustering	Single-Mount, Double (Back-To-Back), Double (Side-To-Side), Triple (Back-To-Back + Single Side), Quadruple (Back-to-Back + Two Sides)
Frame Construction	Welded Frame
Internal Electrical Connections	Flexible Laminated Bus, Silver-Plated Solid Busbar
Color	Textured Powder Coat White (RAL 7035), Blue (RAL 5017), Black, Custom
Seismic Floor Anchors	Optional
Seismic Floor Stand	Optional
Sectionalization	Engineered Composite Insulation, Dead Front Doors
Circuit Breaker Identification	Labels Viewable Through Polycarbonate Window
Electrical Characteristics	
Input Voltage	120/208 V, 3-phase, 4-wire + Ground; 220/380 V, 3-Phase, 4-Wire + Ground; 230/400 V, 3-Phase, 4-Wire + Ground; 240/415 V, 3-Phase, 4-Wire + Ground; 277/480 V, 3-Phase, 4-Wire + Ground; 480 V, 3-Phase, 3-Wire + Ground
Circuit Breaker Mounting Type	Fixed, Plug-In
Frequency	50 Hz, 60 Hz
Poles	3-pole, 4-pole
Input Feeder Termination	Two-Hole, Compression Nema Hole Pattern; Single Mechanical; Dual Mechanical
Neutral Rating	100%, 200%
Number of Output CBs	84-Circuit
Distribution	SafePanel® Distribution
Power Quality Monitoring	
Power Quality Monitoring Technology	LayerZero DPQM (Distribution Power Quality Monitoring)
Waveform Capture	Local Display, Remote Display via Web Browser

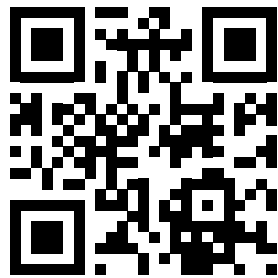
All product specifications are subject to change without notice.

Technical Specifications

Operational Characteristics	
Cooling	Convection Cooling
Cable Access	Top/Bottom
Service Access	Front and Top Only Access
IR Scan Port Type	INSIGHT IR® Portholes on Input
Display Type	3.2" LCD with Membrane,
Connectivity	
Meters	Local Display, Ethernet, Modbus/TCP, http via Web Browser (Non-Proprietary)
Alarms	Local Display, Ethernet, Modbus/TCP, http via Web Browser (Non-Proprietary)
Summary Alarm	Dry Contacts
Waveforms	Local Display, Ethernet, http via Web Browser (Non-Proprietary)
History/Event Log	Local Display, Ethernet, http via Web Browser (Non-Proprietary)
Diagnostics	Local Display, Ethernet, http via Web Browser (Non-Proprietary)
Time Synchronization	Network Time Protocol (NTP)
Standards Conformance	
UL	ETL and cETL listed to UL 60950, UL 67
CSA	CSA 22.2



All product specifications are subject to change without notice.



Learn more at www.LayerZero.com



LayerZero Power Systems, LLC.
1500 Danner Drive
Aurora, OH 44202 U.S.A.

© 2026 LayerZero Power Systems, LLC.

[LayerZero](#)®, INSIGHT IR®, SAFEARM®, SAFEPANEL®, and LayerZero Power Systems, LLC.® are registered trademarks of LayerZero Power Systems, LLC. All Rights Reserved.

All product specifications are subject to change without notice.

Rev. 4/26