VERTIV.

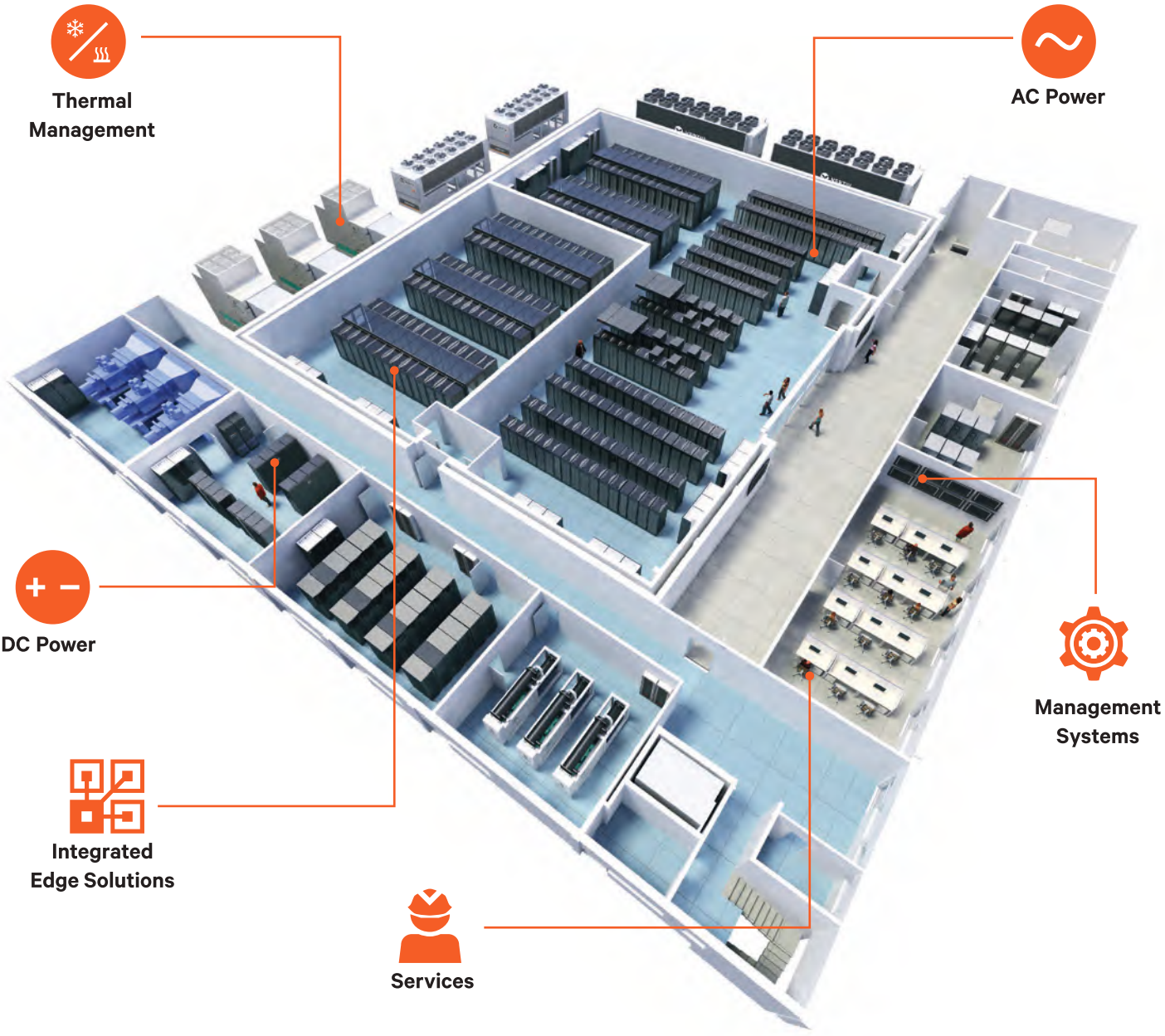
Liebert® SPM™

20kVA - 250kVA

Next Generation Power Distribution range for mission critical businesses

Vertiv solves the most important challenges facing today's data centers, communication networks and commercial & industrial facilities with a portfolio of power, cooling and IT infrastructure solutions, and services that extends from the cloud to the edge of the network.

Architects of Continuity™



What are our core differentiators?

- *VISIONARY EXPERTISE*
- *IMMERSIVE COLLABORATION*
- *RELENTLESS AGILITY*
- *INTELLIGENT ECOSYSTEM*

BUSINESS NEED

Studies show that 80% of all power-related downtime is caused by disruptions between the UPS and the critical load in data centers . Failures can happen because of human error, equipment failures, load faults, short circuits and any number of peculiar events. Probability says that your equipment will eventually fail, and that human error will happen.

Besides on top of that, Datacenter managers finding it tough to adapt in today's dynamic IT loads demands. Particularly, arranging the downtime of few seconds for power up gradation and maintenance has become much tougher during these days due to supreme dependency and criticality of load. Therefore it become extremely important for power distribution system to live up to the dynamic needs of today's business needs

THE SOLUTION

Liebert® SPM2.0 , The Next Generation distribution range

Liebert® SPM 2.0 best suits for today's dynamic change in modern IT loads. It's hot swappable distribution modules enable the customer to deploy, upgrade and manage their dynamic IT business requirements in data centre as and when business row. It can greatly eliminates the downtime and drastically reduces the deployment time too. Besides, manageability improves the system work efficiency to very high extent and also eliminates likelihood of human errors.

The Next Generation Power Distribution Range For Mission Critical Businesses

1 Intuitive Touch Screen Display:

Display panoramic view of the critical Information more graphically to ease humanmachine interaction thus makes maintenance simpler and reduces likelihood of human error.

2 Dual Source

Meeting the requirement of dual source servers while acquiring ZERO footprint requirement. Being placed and shielded separately thus increase the system reliability and shrink the space requirement.

3 Top/ Bottom Cable Entry

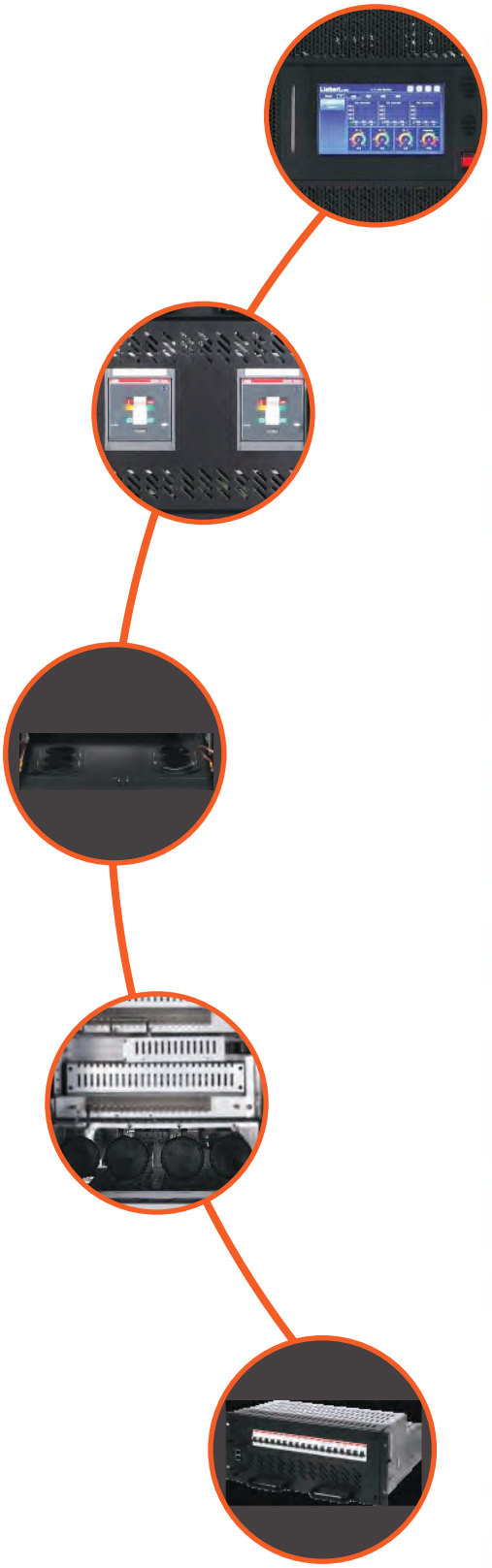
Facilitate false flooring and ceiling applications in the datacenter without any additional accessories.

4 Phase Balancing

Thanks to Modular construction, facilitating phase balancing in a trouble free fashion. Outgoing feeder can be moved among phases L1, L2 and L3 to distribute the loads equally.

5 Hotswappable Scrabble Architecture

Enables customer to upgrade and maintain their critical power distribution system safely and easily without power interruption. Scalable from 20 kVA to 250 kVA



Hot Swappable Outgoing Feeders 6

One module contains 18 sub distribution feeders and each module can house 18 poles. Each modules Support combination of 1/3 pole MCBs. Such 8 Modules can be placed in single floor mounted rack

Branch Circuit Monitoring System (BCMS) 7

High accuracy, high speed data acquisition and diagnostic system provide accumulated information, configurable alarms at sub distribution level.

Capacity Management 8

System provides panoramic view of load helps in planning the load management efficiently.

Communication Optional 9

It can be integrated with building management system through MODBUS RTU/ MODBUS TCP or SNMP communication protocol.

Optional Accessories 10

A host of accessories available with SPM2.0

1. **Built in output Isolation transformer** along with soft-start feature available in k-13, and k-20 variants.

2. **Transient voltage surge suppression (TVSS)** is available for increased protection from damaging voltage surges.

FEATURES

Two Dimensions of Modularity

- Hot Pluggable Feeders
- Hot Pluggable Modules
- Compact Footprint- High-density design
- Intuitive 9" Touch Screen Display
- Micro Power Management
  - Branch Circuit Monitoring
  - Breaker Positioning Monitoring
  - Real-time Waveform Monitoring
  - Online Report Generation
  - Two Level User-Configurable Alarms
- Single or Dual Input Power Supply
- 144No power distribution poles
- Remote Monitoring Facility
- Built in Top/Bottom Cable Entry for Raised / Non-raised Floor applications
- Optional TVSS and Isolation Transformer
- Factory assembled & Tested
- CE & CCC Certified

YOU HAVE TO KNOW THERE IS A PROBLEM BEFORE YOU CAN CORRECT THE PROBLEM

Liebert® SPM2.0 features a high resolution and high sensitivity touch screen display designed based on the Cortex A8 processor, allowing for user friendly interaction. Menu-driven LCD allows the user to easily browse the input and output parameters, acquire current status and alarm messages, and perform corresponding parameter settings of the

Liebert® SPM2.0. It can display the real time Power flow diagram showing the system status and alarm messages. It can store up to 10000 historical events that can be easily retrieved to realize the root cause of faults.

Energy Management from Grid to chip level.

Comprehensive energy management attributes panoramic view of entire power flow from main incomer to individual sub feeders.

Power monitoring of sources:

Power path status via animated single-line mimic display. Shows the current status of main source, source breaker and distribution modules. the individual source Information such as voltage, current, power, energy and harmonics. Gives clear cut picture of power distribution system.

Feeder level Monitoring:

Shows real time feeder information such as Voltage, Current, harmonics and Power Monitoring (kVA, kW, kVAR & PF).

Power Trending :

Displays the historical voltage, current, power, energy consumption and environmental trending of each branch and feeder by a week, Month & Year. Also has the facility can generate report for this.

Exhaustive Event Logger:

It can display the events 10000 events from the source to feeder for configured alarms can prevent the failure of system from overload and environmental conditions

TWO DIMENSIONS OF SCALABILITY

Two Dimensions of Modularity

- Hot Pluggable Feeders
- Hot Pluggable Modules

Horizontal Modularity:

Each module contains18 poles and supports a combination of 1/3 pole MCBs. Such 8 modules can be placed in single floor mounted rack

Vertical Modularity:

Enables customer to upgrade and maintain their critical power distribution system safely and easily without any power interruption.

Hot Scalable from 20 kVA to 250 kVA

Phase balancing easier than ever before

Distribution Module

No need to oversize your PDU

Technical Specifications

Capacity(kVA)		20	40	60	80	100	120	160	200/250
Main Parameters Capacity									
Input		380V; 50Hz; 3 phase, 5 wires							
Output		Single phase, 3 wires; 3 phase, 5 wires							
Grounding		TN-S							
Power distribution		Flexible configuration of maximum 144 no.							
Breaker Parameters									
Input Breaker		32A	63A	100A	125A	160A	200A	250A	320A / 400A
Output Shunt Breaker	Recommended	18 branches, 10A, single phase		72 branches, 16A, single phase		84 branches, 32A, single phase			108 branches, 32A, single phase
	Maximum	36 branches, customized capacity		90 branches, customized capacity		108 branches, customized capacity		144 branches, customized capacity	
Electrical Parameters									
Rated Insulation Voltage		50Hz/60Hz, 500Vac							
Rated Frequency		50Hz/60Hz							
Operating Voltage		380/400/415Vac							
Protection Level		IP20/IP30							
Environmental Parameters									
Ambient Temperature		-5°C ~ +40°C							
Relative Humidity		Not more than 50%RH at a temperature up tp +40°C. Higher RH is allowed at a lower temperature, for example, 90%RH +20°C							
Altitude		≤2000m							
Mechanical Parameters									
Dimensions (W x D x H)(mm)		600 x 1100 x 2000							
Weight		300kg		320kg		380kg			450kg
*Specifications are subject to change without any prior notification									

Vertiv Energy Private Limited