

The rack-size Liebert FPC provides higher quality, more flexible power distribution for high-density data centers. It is engineered to combine the convenience and cost savings of a pre-packaged, factory-tested unit with the flexibility of a custom-tailored power system. This self-contained system provides voltage transformation power isolation, power distribution, computer-grade grounding and power monitoring.



Features & Benefits

Flexibility:

- Sub-feed breakers or I-Line panelboards give you the flexibility to add distribution capacity as needed to adapt to growing room loads.
- Utilizes inline 42-pole panelboards, which provide wide-open wiring access channels for easy installation of additional circuits.
- Various cabling options provide flexibility — top exit for non-raised floor and bottom exit for raised floor applications
- Full front and rear access for easy maintenance.

Higher Availability:

- Factory testing ensures reliable, consistent performance, so unplanned downtime is avoided.
- Local and remote power monitoring capabilities enable you to attain maximum availability for your critical operations.

Lowest Total Cost Of Ownership:

- Four panelboard capacity saves money by eliminating need for multiple cabinets.
- Ability to install additional distribution capacity within the same cabinet as needs change helps to manage costs over service life of system.
- Larger kVA capacity rating means fewer units will be needed to support IT growth.
- In-rack location places power distribution closer to the load, thereby reducing cabling to the rack, making cable movements simpler and less expensive.

Frequently Asked Questions	
Question	Resolution
Why do I need a product like this in my data center?	<p>As your rack-mount systems grow in number, complexity and criticality — so must your power distribution system.</p> <p>Creating high quality power is a major step towards protecting the operation of a critical facility. The Liebert FPC power center is designed to manage power from the UPS all the way to each individual piece of computing and communications hardware</p> <p>The Liebert FPC features a compact, space saving design, flexible breaker configurations, plus local and remote power monitoring capabilities. Available in capacities from 15 kVA up to 150 kVA the Liebert FPC offers flexibility to fit both the space and electrical requirements of IT equipment.</p>
What does the Liebert FPC do?	<p>The Liebert FDC is designed to optimize power distribution at the rack level with “plug-and-play” flexibility. It is a self-contained system that provides:</p> <ul style="list-style-type: none"> ▪ Power Isolation ▪ Power Distribution ▪ Computer-Grade Grounding ▪ Power Monitoring
What makes the Liebert FPC stand out from the competition?	<ul style="list-style-type: none"> ▪ It is engineered to combine the convenience and cost savings of a prepackaged, factory-tested unit with the flexibility of a custom-tailored power system. ▪ The packaged system approach is convenient and space-saving, reducing installation time and cost compared to a conventional approach using multiple interconnected components. ▪ The Liebert FPC is built on a proven system design used in thousands of installations, and unlike one-of-a-kind, built-up distribution arrangements constructed at the site, it undergoes thorough factory testing as a complete system to assure reliable, consistent performance. ▪ A capacity range of 15-150kVA enables it to accommodate increasing power densities when growth occurs. ▪ With optional Liebert Distribution Monitoring, the Liebert FPC has more comprehensive monitoring than any other product on the market. With the ability to go beyond the branch circuit monitoring, you increase the likelihood that you will be alerted to potential problems before they can affect your connected equipment, thereby reducing the chance of costly unplanned downtime. ▪ The Liebert FPC offers a variety of cable management options—cables can be routed across the top of the racks, under the floor or through the bottom of the cabinet—providing flexibility.

Liebert FPC Power Distribution Unit



Competitive Comparison

Feature	Liebert FPC	APC InfraStruXure	PDI Powerpack PDU	MGE Power Management Module	United Power PDM	The Liebert Advantage
Monitoring	Local and remote monitoring is standard. Liebert Distribution Monitoring (optional) can adapt monitoring to include any combination of panelboard main breaker, branch breaker, sub-feed breakers and / or output breaker.	Branch circuit monitoring optional (local and remote)	Local and remote branch circuit monitoring optional. Local monitoring optional.	Branch circuit monitoring optional. Advanced monitoring (advanced multi-function meter options that encompass additional metering and monitoring features) is optional.	Remote monitoring is standard. Branch circuit monitoring is optional.	Unlike competitive products that are limited to two alarms and branch circuit monitoring only, Liebert's monitoring with optional Liebert Distribution Monitoring provides over 500 monitoring and alarm points per panelboard and has dozens of monitoring parameters to choose from. Liebert's comprehensive monitoring increases the likelihood that users are alerted of potential problems before those problems can affect the connected equipment, thereby reducing the chance of costly unplanned downtime.
Panelboard Space	Two panelboards for 15-125 kVA. Additional panelboard space, 4 instead of 2, for 50-125kVA. Unique in-line panelboards provide additional wiring space (50% more space than our old product) in the wiring area. 42 poles in a single row versus side-by-side.	Two panelboards	Two panelboards standard. Two additional panelboards optional.	Two panelboards, Additional panelboards are optional by adding distribution cabinet.	Two panelboards, Additional panelboards are optional by adding distribution cabinet.	The Liebert FPC has more panelboard options, for 50 kVA and greater. Since panelboards provide expansion opportunities so there are always enough branch circuits, the FPC has the greatest flexibility to expand as power densities increase, while keeping costs low.
Sizes WxDxH	19"x38.5"x78.5" and 47"x38.5"x78.5"	29"x36"x81"	(33"x38"x69") 2 panelboards. 41"W with 4 panelboards	42"x27"x72" 2 panel boards. 72"W with 4 panel boards	One size (34"x34"x69")	The Liebert FPC's two sizes provide IT professionals with more flexibility than competitors' cabinets as users configure their spaces.

Specifications

Liebert FPC	15-125 KVA	150 KVA
Power Rating		
Rating (kVA)	15, 30, 50, 75, 100, 125	150
Rating (kW)	15, 30, 50, 75, 100, 125	150
Input AC Specifications		
Input Voltage	480	480
Input Voltage Range	-13% to +6%	-13% to +6%
Input Current (Amps)	19-156	185
Frequency (Hz)	60	60
Frequency Range	+/-0.5Hz	+/-0.5Hz
Phase	3	3
Power Factor	0.75 to 1.0	0.75 to 1.0
Surge Protection	ANSI/IEEE C62.41 Category B3	ANSI/IEEE C62.41 Category B3
Input Circuit Breaker (Amps)	25-200	250
Input Connections	Junction Box w/10 ft field wired cable	Junction Box w/10 ft field wired cable
Output AC Specifications		
Panelboards	2	4
Nominal Voltage	208/120	208/120
Branch Circuit Breakers	84	168
Frequency (Hz)	60	60
Efficiency	96.5 to 98%	96.5 to 98%
Output Waveform	Sine Wave	Sine Wave
Crest Factor	Up to 3.5	Up to 3.5
Distortion	0.5% Max Additive	0.5% Max Additive
Transformer Specifications		
Type	Double Shielded	Double Shielded
Windings	Copper	Copper
NEMA Standard	TP1	TP1
Temperature Rise	150°C	150°C
Impedance	4.5% to 4.7%	4.5% to 4.7%
Taps	6 (-10% to +5%)	6 (-10% to +5%)
Overload Protection	2 Sensors per winding (180°C & 200°C)	2 Sensors per winding (180°C & 200°C)

Specifications		
Liebert FPC	15-125 kVA	150 kVA
User Interface		
Display Type	LCD	LCD
Audible Alarms	Yes	Yes
Communications		
Communications Standard	RS-422, RS-232	RS-422, RS-232
Communications Options	Liebert IntelliSlot Web/485 Card with Adapter, LDM	Liebert IntelliSlot Web/485 Card with Adapter, LDM
Environmental		
Operating Temperature—Minimum	32° (0°C)	32° (0°C)
Operating Temperature—Maximum	104°F (40°C)	104°F (40°C)
Storage Temperature—Minimum	-67°F (-55°C)	-67°F (-55°C)
Storage Temperature—Maximum	185°F (85°C)	185°F (85°C)
Relative Humidity	0% to 95% without condensing	0% to 95% without condensing
Operating Elevation	Up to 6,600 ft. (2,000m)	Up to 6,600 ft. (2,000m)
Storage Elevation	Up to 40,000 ft. (12,200m)	Up to 40,000 ft. (12,200m)
Sound Emission/Audible Noise	ANSI C89	ANSI C89
Heat Dissipation	.73kW to 3.37kW	3.66kW
Cooling	Convection	Convection
Physical Data		
Shipping Depth in(mm)	48 (1220)	70 (1778)
Shipping Height in(mm)	84 (2134)	84 (2134)
Shipping Width in(mm)	48 (1220)	54 (1372)
Shipping Weight lbs(kg)	1100 (499) to 1740 (789)	2630 (1193)
Unit Depth in(mm)	39.5 (1003)	39.5 (1003)
Unit Height in(mm)	78.5 (1994)	78.5 (1994)
Unit Width in(mm)	23.5 (597)	47 (1194)
Unit Weight lbs(kg)	1010 (458) to 1650 (748)	2490 (1129)
Color	Black	Black
Agency/Certification/Conformance		
Safety	UL 60950	UL 60950
	ANSI, CSA, NEC, NEMA	ANSI, CSA, NEC, NEMA
	NFPA 75	NFPA 75
RFI/EMI	FCC Part 15 EMI Class A	FCC Part 15 EMI Class A
Transportation	ISTA - Procedure 1H	ISTA - Procedure 1H
Seismic	None	None
Options		
	Input Lightning/Surge Arrester	Input Lightning/Surge Arrester
	Output Surge Suppression Module	Output Surge Suppression Module
	Subfeed Output Circuit Breaker	Subfeed Output Circuit Breaker
	K-Rated Transformer	K-Rated Transformer
	Floor Pedestals	Floor Pedestals
	Liebert IntelliSlot Web/485 Card with Adapter	Liebert IntelliSlot Web/485 Card with Adapter
	Liebert Distribution Monitoring (LDM)	Liebert Distribution Monitoring (LDM)
Warranty		
Standard	1 year or 18 months after ship date	1 year or 18 months after ship date
Extended	None	None

Liebert FPC Related Products



Liebert FDC

Fits in the rack row to provide power distribution to individual racks when used with the Liebert FPC.



Liebert NX (40-120kVA)

The new Liebert NX with SoftScale™ UPS platform can be sized to current requirements and then easily scaled as needs change.



Installation And Service

Only Emerson can provide the industry's largest, most experienced service organization with a proactive approach that prevents failures and extends equipment life.



Liebert Nform

A simple to use monitoring and communications software solution that combines network monitoring of power and cooling equipment.

Liebert MP Advanced Power Strips are designed to distribute and manage power within network cabinets and server racks. Models are available with remote monitoring and/or control capabilities for power distribution at the load/equipment level. Liebert MP is available in multiple configurations that provide a choice of capacities and number of receptacles to meet the power management requirements of any rack-mounted equipment.

Features & Benefits		
Flexibility:	Higher Availability:	Lowest Total Cost Of Ownership:
<ul style="list-style-type: none"> ▪ Broad selection of products to support specific user needs. ▪ Easy to use local status displays and remote monitoring and management. ▪ Monitoring and control capabilities include SNMP support and e-mail alarm notification. 	<ul style="list-style-type: none"> ▪ Higher reliability with PCB receptacle mount construction. ▪ Load monitoring and control supports continuous uptime, minimizes disruptions. 	<ul style="list-style-type: none"> ▪ Lower cost of ownership via reduced maintenance and repair and consolidated IP addressing.

Frequently Asked Questions	
Question	Resolution
<p>What makes Liebert MP Advanced Power Strips worth the extra money compared to a standard strip?</p>	<p>Liebert MP Advanced Power Strips are more than several times the value of ordinary power strips that do nothing more than distribute power. They can monitor power use at the strip level and can control power at the outlet level. The Liebert MP-M Series Strips provide real-time local and remote display of total strip volts, amps and true RMS watts, with renameable receptacles for inventory tracking. The Liebert MP-C Series Strips have the same monitoring capabilities and can be used to switch power on and off to individual plugs, preventing unauthorized connections.</p> <p>Most data center customers realize a payback in under a year from reduced administration and problem prevention. And customers with remote locations can get full payback on their investment by preventing a single service call.</p>
<p>What makes these better than others I've seen for sale?</p>	<p>For greater reliability, Liebert MP Advanced Power Strips use "PCB distribution" to connect receptacles to the power bus. Other types of connections used by competitive units, such as punch-down connectors, provide far less reliability over time, because they may fail more often.</p>
<p>How difficult are Liebert MP Advanced Power Strips to install and setup?</p>	<p>With both in-rack and vertical power strips, single-phase or three-phase inputs, and a variety of output plug types, the Liebert MP Advanced Power Strips will work with almost every manufacturer of power, rack or cabinet systems. The Liebert MP Advanced Power Strips come with an easy-to-use "Quick Start" guide. Most people have no problems with installation.</p>



Competitive Comparison

Feature	Liebert MP Advanced Power Strips	APC	Geist
Power Readings	Current, Voltage & Power	Current Only	Current Only
Switched Receptacles	Yes	Yes	Not Available
Zero U Models	120/208 VAC 20/30 AMP 21 Receptacles 208V 3PH 24 Receptacles	120/208 VAC 20 AMP 16 Receptacles 208V 3PH 24 Receptacles	Single Phase 120/208 VAC 24 Receptacles 3PH 120/208 VAC 24 Receptacles
Rackmount Models	120/208 VAC 20/30 AMP 18 Receptacles	120/208 VAC 20/30 AMP 16 Receptacles	120/208 VAC 20/30 AMP 16 Receptacles
IP Connectivity (*)	One IP per 32 Power Strips	One IP per power strip	Not Available
Rackmount Models	PCB	Insulation Displacement/Wire Solder	Insulation Displacement/Wire Solder



Liebert MP® Advanced Power Strips



Specifications

Form Factor	INPUT (Rated)		Connection(s)				OUTPUT (Rated)		Connection(s)			Monitoring	Liebert
	Voltage	Current	Phase	Type	Quan	Length	Voltage	Current	Phase	Type	Quan	LCD/LED	Part Number
Liebert MP Advanced Power Strips (Monitoring) / MP-M Series													
Rckmnt / 1U	120	15	1PH	5-15P	1	6'	120	15	1PH	5-15/20R	10	LCD	MP-M5109
Rckmnt / 1U	120	20	1PH	5-20P	1	6'	120	20	1PH	5-15/20R	10	LCD	MP-M5110
Rckmnt / 1U	120	20	1PH	L5-20P	1	6'	120	20	1PH	5-15/20R	10	LCD	MP-M5111
Rckmnt / 1U	120	30	1PH	L5-30P	1	6'	120	30	1PH	5-15/20R	10	LCD	MP-M5112
Rckmnt / 1U	200-240	20	1PH	L6-20P	1	6'	200-240	20	1PH	IEC-C13	10	LCD	MP-M5113
Rckmnt / 1U	200-240	30	1PH	L6-30P	1	6'	200-240	30	1PH	IEC-C13	10	LCD	MP-M5114
Vert. / 33.25"	120	15	1PH	5-15P	1	10'	120	15	1PH	5-15/20R	12	LCD	MP-M5115
Vert. / 33.25"	120	20	1PH	5-20P	1	10'	120	20	1PH	5-15/20R	12	LCD	MP-M5116
Vert. / 33.25"	120	20	1PH	L5-20P	1	10'	120	20	1PH	5-15/20R	12	LCD	MP-M5117
Vert. / 50.75"	120	20	1PH	5-20P	1	10'	120	20	1PH	5-15/20R	24	LCD	MP-M5118
Vert. / 50.75"	120	20	1PH	L5-20P	1	10'	120	20	1PH	5-15/20R	24	LCD	MP-M5034
Vert. / 50.75"	120	30	1PH	L5-30P	1	10'	120	30	1PH	5-15/20R	24	LCD	MP-M5035
Vert. / 57.75"	200-240	20	1PH	L6-20P	1	10'	200-240	20	1PH	IEC-C13	24	LCD	MP-M5036
Vert. / 57.75"	200-240	30	1PH	L6-30P	1	10'	200-240	30	1PH	IEC-C13	24	LCD	MP-M5037
Vert. / 68.25"	120/208	20	3PH	L21-20P	1	10'	208 & 120	20	1PH	IEC-C13+5-20R	24+2	LED	MP-M5119
Liebert MP Advanced Power Strips (Controlled) / MP-C Series													
Rckmnt / 1U	120	15	1PH	5-15P	1	6'	120	15	1PH	5-15/20R	8	LCD / LED	MP-C5120
Rckmnt / 1U	120	20	1PH	5-20P	1	6'	120	20	1PH	5-15/20R	8	LCD / LED	MP-C5121
Rckmnt / 1U	120	20	1PH	L5-20P	1	6'	120	20	1PH	5-15/20R	8	LCD / LED	MP-C5122
Rckmnt / 1U	120	30	1PH	L5-30P	1	6'	120	30	1PH	5-15/20R	8	LCD / LED	MP-C5123
Rckmnt / 1U	200-240	20	1PH	L6-20P	1	6'	200-240	20	1PH	IEC-C13	8	LCD / LED	MP-C5124
Rckmnt / 1U	200-240	30	1PH	L6-30P	1	6'	200-240	30	1PH	IEC-C13	8	LCD / LED	MP-C5125
Vert. / 68.25"	120	20	1PH	5-20P	1	10'	120	20	1PH	5-15/20R	20+1	LCD / LED	MP-C5147
Vert. / 68.25"	120	20	1PH	L5-20P	1	10'	120	20	1PH	5-15/20R	20+1	LCD / LED	MP-C5148
Vert. / 68.25"	120	30	1PH	L5-30P	1	10'	120	30	1PH	5-15/20R	20+1	LCD / LED	MP-C5131
Vert. / 68.25"	200-240	20	1PH	L6-20P	1	10'	200-240	20	1PH	IEC-C13	20+1	LCD / LED	MP-C5132
Vert. / 68.25"	200-240	30	1PH	L6-30P	1	10'	200-240	30	1PH	IEC-C13	20+1	LCD / LED	MP-C5133
Vert. / 68.25"	120/208	20	3PH	L21-20P	1	10'	120	20	1PH	5-15/20R	21	LCD / LED	MP-C5134
Vert. / 68.25"	120/208	20	3PH	L21-20P	1	10'	208	20	3PH/1PH	NEMA L21-20 + IEC320 C13	1 + 18	LCD / LED	MP-C5135
Vert. / 68.25"	120/208	30	3PH	L21-30P	1	10'	208	30	3PH/1PH	NEMA L21-20 + IEC320 C13	1 + 18	LCD / LED	MP-C5136

Liebert MP Advanced Power Strips (Access Series) / MP-S Series

Form Factor	Input Voltage	Input Plug	Length	PDU's Supported	Installed Network Cards	Installed RS232 Cards	Part Number
Rckmnt / 1U	120	5-15P	6'	4 (Expand to 8)	1	1	MP-S5137-125
Rckmnt / 1U	200-240	IEC-C14	6'	4 (Expand to 8)	1	1	MP-S5137-230
Rckmnt / 1.5U	120	5-15P	6'	4 (Expand to 20)	1	1	MP-S5138-125
Rckmnt / 1.5U	200-240	IEC-C14	6'	4 (Expand to 20)	1	1	MP-S5138-230
Rckmnt / 2U	120	5-15P	6'	4 (Expand to 32)	1	1	MP-S5139-125
Rckmnt / 2U	200-240	IEC-C14	6'	4 (Expand to 32)	1	1	MP-S5139-230

Expansion Module

Form Factor	Type	Input Voltage	Connection	Part Number
Card	RS-232	NA	4X RS232	MP-DS74

Liebert MP Strips Related Products



Knurr Racks

Complete line of racks and cabinets, featuring adjustable racks and rack rails, reversible quick release doors, improved cable management, easy access side panels and multiple door options.



Liebert MCR

Self-contained cabinet with cooling and options for power protection and management systems.



Liebert Nform

A simple to use monitoring and communications software solution that combines network monitoring of power and cooling equipment.



Liebert XDF

A secured enclosure with integrated high heat density cooling, providing the benefits of big room support in a cost-effective package. Optimized horizontal air circulation cools the protected equipment, both in standard mode and in the backup ventilation mode



Liebert OpenComms EM and Liebert OpenComms vEM-14 Controllers

Liebert OpenComms EM controllers are network-enabled devices for monitoring temperature, humidity and contact closures inside critical environments, including racks and small computer rooms.