



Product brochure

Vertiv™ Liebert® TFX PDU 50* – 300 kVA

Efficient and reliable power distribution for your
mission-critical applications



Efficient and reliable power distribution for your mission-critical applications

The Vertiv™ Liebert® TFX is a floor-mounted power distribution unit (PDU) for enterprise companies and multi-tenant colocation providers. Offering customized configuration and a compact footprint, the Vertiv Liebert TFX provides reliable uninterrupted single- or two-stage power distribution in small-to mid-sized data centers, network and server rooms, edge applications, and remote mission-critical facilities.

For companies that require custom distribution to meet the specific needs of their facilities, the Vertiv Liebert TFX offers flexible power options. The unit is made-to-order, and is shipped to you with panelboards and subfeeds configured according to your specifications. Also, as power demands grow, you can add Vertiv Liebert TFX FLX expansion cabinets to supplement the base transformer with additional capacity.

The Vertiv Liebert TFX addresses space constraints and mobility challenges for PDUs in data center environments. The compact transformer cabinet can easily be moved through doorways and installed in corners, enabling you to make better use of floor space for IT equipment. The unit's modular design features isolated panelboards, supporting safer maintenance for engineers to do onsite maintenance on individual low-voltage monitoring components while the rest of the unit is live. An intuitive power monitoring system keeps you informed of operating status, equipment loads, and potential overloads.

Ideally suited for:

- Local and remote computing
- Small- to mid-sized data centers
- Server rooms
- Network closets
- Edge facilities
- Distributed computer networks
- Containerized and micro data centers





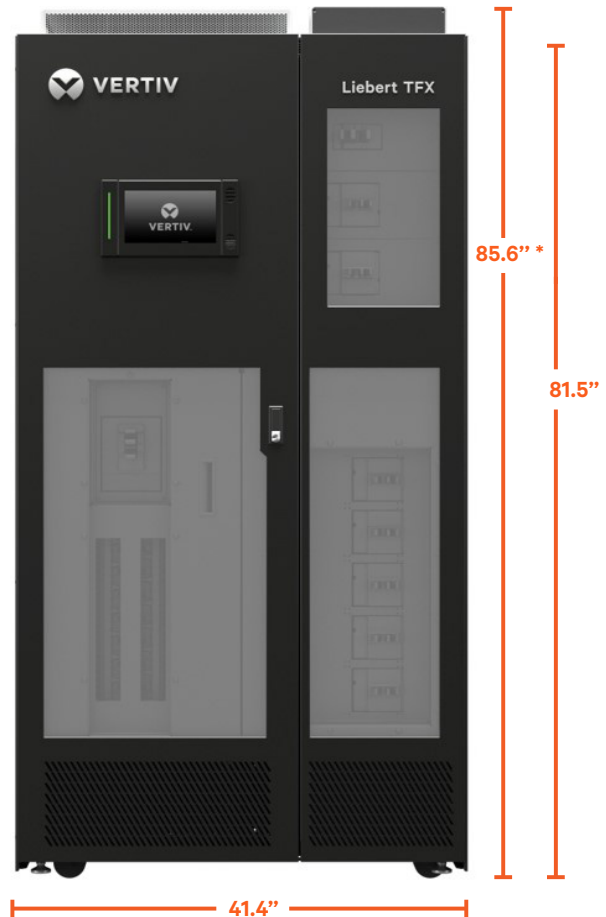
Features of the Vertiv™ Liebert® TFX

Flexible power distribution	Compact, modular design	Intelligent power monitoring and system control
Customized distribution according to your power needs and applications	Compact unit minimizes space requirements	9" color touchscreen display
Supports multiple input/output configurations	Easy mobility and installation	Easily program the unit and manage equipment loads using the navigation menu
Customized unit includes up to 3x42P panelboards, and 5x600AF or 12x250AF subfeeds	Top and bottom wire input and exit	On-screen display offers one-line system and individual breaker status, and equipment load levels
Available as a Standard Configuration in 200 kVA, 225 kVA, 250 kVA, and 300 kVA models. • *Available as ETO (Engineered to Order) in 50 kVA, 75 kVA, 100 kVA, 125 kVA, and 150 kVA models.	Subfeed breakers include pre-wired circuit transformers	Voltage, current, power, and energy metering
Single- and dual-stage distribution options	Front-serviceable	Import or export site-specific settings to or from other PDUs
High power capacity	Isolated high-voltage and low voltage printed circuit boards for safe and easy maintenance	Automatic notifications of potential overloads and other emergencies
Copper (Cu) and Aluminum (Al) transformer options	Compliant with UL60950 & UL62368-1	Optional waveform capture
Vendor agnostic		Four-level security access control
Operates at up to 40°C		Local and remote emergency power-off
Supports coordination between Vertiv UPS and STS units		Easily integrate with your BMS to monitor and manage local and remote power distribution
DOE2016 compliant transformers		
Up to ANSI/IEEE C62.41		
Vertiv™ Liebert® TFX FLX expansion cabinets available for additional power distribution		



Depth = 35.1" without front door

* Top conduit plate adds 4" to overall installed height



Vertiv™ Liebert® TFX

Compact design: Space-saving unit requires minimal floor space, and designed to fit through standard doorways and freight elevators..

Touchscreen control: Vertiv™ Liebert® DPM provides a 9" color touchscreen for system programming and high-visibility monitoring.

Easy maintenance access: Front access only for service, side access recommended for installation.

Custom configurations: Power configurations are made-to-order, according to your application demands.

Panelboards and subfeeds: Each unit includes up to 3 x 42P panelboards, and 5 x 600AF or 12 x 250AF subfeeds.

Isolated PCBs: Engineers can safely service or replace low voltage printed circuit boards while high-voltage breakers are live.

Product warranty: Comprehensive coverage through a standard exchange warranty. (One (1) year after product startup, or eighteen (18) months after product shipment.)

Distribution topology

Up to 12 x 250 AF or 5 x 600 AF subfeeds, or up to 3 x 42P panelboards

Monitoring

Vertiv™ Liebert® DPM meters voltage, current, power, and energy at 0.5% accuracy; waveform capture optional

Breaker accessories

Auxiliary Switch(es), Alarm Switch

Access

Front access only for service, side access recommended for installation



Vertiv™ Liebert® DPM distribution power monitoring

Vertiv™ Liebert® DPM is an intelligent, embedded power monitoring system that delivers accurate, real time visibility across onsite and remote facilities. A large 9" color touchscreen with a user friendly graphical interface presents a one line diagram with individual breaker and load status, simplifying operation and accelerating training. DPM meters voltage, current, power, and energy with 0.5% accuracy to support capacity planning, billing grade insights, and continuous efficiency improvement. It streamlines deployment through automated commissioning and import/export of configurations, and it integrates seamlessly with BMS/EPMS platforms to centralize monitoring and control.



Uptime is protected with automatic overload notifications and both remote and local EPO, while configurable visual and audible alarms surface abnormal conditions before they disrupt operations. Event-triggered waveform capture records and visualizes power disturbances as they occur, helping teams speed root-cause analysis, document power quality events, and optimize incident response.

Combined with continuous sampling and comprehensive monitoring, data center teams can leverage DPM insights to balance phases, manage white space utilization, independently calculate PUE, and measure progress over time.

Normal Operation												
11/24/2025 3:47 PM												
METERING												
Component	Freq	Voltage L-L (Volts)			Current (Amps)			Current (%)	Power (kW)	Peak Curr.	Peak Demand	
		Ph. A	Ph. B	Ph. C	Ph. A	Ph. B	Ph. C					
✓ Input	601	480.0	480.0	480.0								
✓ Transformer	601	208.0	208.1	207.9	310.5	308.7	308.4	37.3	111.9		120.0	
✓ Branch PB 1	0.0	208.0	208.1	207.9	145.59	145.53	145.59	36.4	52.45	156.22	56.28	
✓ Branch PB 2	0.0	208.0	208.1	207.9	74.76	74.75	74.76	18.7	26.93	80.22	28.90	
✓ Subfeed 1	601	208.0	208.1	207.9	4515	4560	4380	18.2	16.43	5107	18.40	
✓ Subfeed 2	601	208.0	208.1	207.9	34.04	33.19	34.38	13.8	12.39	38.51	13.87	
✓ Subfeed 3	601	208.0	208.1	207.9	29.48	27.71	28.30	11.8	10.62	33.02	11.90	

STATUS

Normal Operation

LIFE SERVICES

LOG IN

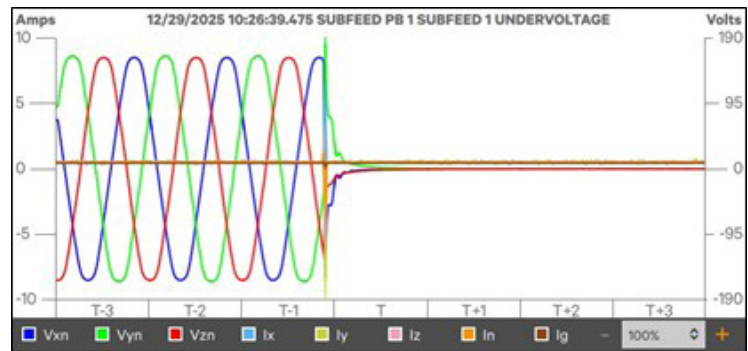
EVENT LOG

Export

Filter

Date/Time	Type	ID	Status	Component	SubComp	Description
12/28/2025 19:00:55.000	Fault	135	ON	Input 2		High Voltage THD: 19%
12/28/2025 19:00:55.000	Fault	112	ON	Input 1		High Voltage THD: 68%
12/28/2025 19:00:55.000	Fault	215	ON	Branch PB 1		Main Shutdown UV: 62V 7...
Description: Main Shutdown UV: 62V 79V 86V						
12/28/2025 19:00:55.000	Fault	215	ON	Branch PB 2		Main Shutdown UV: 19V 54...
12/28/2025 19:00:54.105	Alarm	341	ON	Subfeed PB 1	Subfeed 1	Neutral Overcurrent: 105A
12/28/2025 19:00:53.104	Alarm	313	ON	Subfeed PB 1		Neutral Overcurrent: 104A
12/28/2025 19:00:52.103	Alarm	213	ON	Branch PB 2	Branch 2	Neutral Overcurrent: 103A
12/28/2025 19:00:51.102	Alarm	213	ON	Branch PB 1	Branch 1	Neutral Overcurrent: 102A

Subfeed Phase Overcurrent												
11/24/2025 3:37 PM												
SUBFEED 1												
Meter Data Events Waveforms Configuration												
Date/Time Description												
11/24/2025 2:37 PM Breaker Tripped												
11/24/2025 2:37 PM Ph Overcurrent												



Benefits

- User-friendly graphical interface
- Single-line diagram showing real-time system status
- Accurate power usage metering for billing or cost allocation
- Automatic charting display for logged power and environmental data
- Management of equipment loads on local and remote facilities
- Visual and audible warnings of near overload conditions
- Optional waveform capture for easy identification of power quality issues or outages
- Optional local and remote Emergency Power Off

9-Inch touchscreen display

Breaker accessory monitoring

Alarm annunciation

On-Screen programming

Waveform capture

Transformer in/out



Consistent and reliable power distribution

- Reliable PDU delivers consistent power to your mission-critical IT equipment
- Transforms voltage from your UPS into standard voltage, for distribution throughout your IT environment
- Energy levels between 50*-300 kVA make it suitable for small to mid-sized facilities
- Single-stage option lets you distribute power directly to IT rack PDUs
- Dual-stage option lets you distribute power to Remote Power Panels (RPPs) or busways, for distribution to server racks or cabinet rows
- Designed for high energy efficiency
- Custom Configurations
- Each unit is configured to handle your facility's specific power requirements
- Units are made to order, with the right combination of panelboards, subfeeds, or both (For example, your custom PDU may include one 42P panelboard and seven 250AF subfeeds)
- Limited onsite customization of subfeed breakers and branch circuit breakers can be performed at your facility after installation
- Optional Vertiv™ Liebert® TFX FLX expansion cabinets provide additional distribution as power needs grow

Easy installation with better use of space

- Compact PDU design allows you to maximize floor space for IT equipment
- Well-suited for small data centers, network closets, server rooms, and containerized or micro data centers where floor space is constrained
- Caster wheels make it easy to move the unit into place
- Front-serviceable unit can be installed next to walls, in corners or alcoves
- 36-inch depth supports installation through standard doorways and freight elevators
- Top and bottom wire input/exit accommodates both overhead and underfloor electrical conduit runs
- Subfeed breakers come with pre-wired circuit transformers on the phases
- Intuitive on-screen display streamlines system programming and breaker configuration, including fast export and import of settings across all PDUs throughout a data center

Easy maintenance

- Isolated printed circuit boards allow service personnel to replace or troubleshoot high- and low-voltage PCBs without powering down the unit
- Modular design of the unit minimizes downtime to critical power path during maintenance
- The unit is designed to reduce potential for downstream short-circuit fault currents
- Accessible and knowledgeable tech support and field service engineers

PDU Specifications

Electrical

kVA Rating	200 kVA, 225 kVA, 250 kVA, 300 kVA Standard / *50 kVA, 75 kVA, 100 kVA, 125 kVA, 150 kVA *ETO (Engineered to Order)
Input	3-phase, 3-wire plus ground
Input voltage	At 50 Hz: 380 V–415 V At 60 Hz: 480 V
Output	3-phase, 4-wire plus ground
Output voltage	At 50 Hz: 380/230 V, 415/240 V At 60 Hz: 415/240 V, 208/120 V
Agency listed to	UL 60950-1, UL 62368-1, FCC Part 15, and ANSI/IEEE C62.41 for Category B1 locations

Operating conditions

Operating temperature	0 to 40°C
Storage temperature	-20 to 55°C
Audible noise	Meets NEMA ST-20 standard
Relative humidity	0 to 90% non-condensing
Altitude	up to 6,600 ft

Transformer

Meets DOE2016 standard	
Transformer ratings available in	K4, K13, K20
Transformer material type	Copper (Cu) and Aluminum (Al)
Neutral conductor rating	200%
Temp rise options	150°C (Standard), 115°C, 80°C
Vertiv transformers have been designed.	

Monitoring

Monitoring locations	Transformer input and output, mains, subfeeds, branch circuits
Display	9" color touchscreen with user-friendly graphical interface showing one-line diagram and individual breaker status
Accuracy	0.5% for voltage, current, power, and energy
Power quality	Power factor, harmonics, waveform capture (optional)
Event logging	Up to 1000 events at 1ms timestamp precision
Communication	RDU120 monitoring card with UL2900-1 and IEC 62443-4-2 cybersecurity certifications
Protocols	Velocity RS-485, Modbus RS-485, Modbus (IP) TCP, BACnet/MSTP, BACnet IP, SNMP, SMS, HTTP/HTTPS, Email



Additional expansion cabinets

If your facility requires additional power configurations, the following expansion cabinets are used to supplement the Vertiv™ Liebert® TFX.



*Vertiv™ Liebert® TFX FLX12A
front-facing subfeed
distribution cabinet*

- Features 4x250AF or 3x600AF subfeed breakers
- 12-inch width



*Vertiv™ Liebert® TFX FLX12D
side-facing panelboard
distribution cabinet*

- Featuring 250A and/or 400A panelboards
- 12-inch width



*Vertiv™ Liebert® FLX18E
side-facing I-LinePanelboard
distribution cabinet*

- Features 800A I-Line panelboard, 800A back-fed main breaker (100% rated)
- 18-inch width

