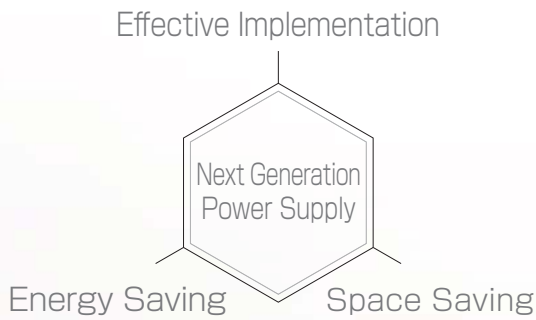


# Rack-Mount DC Power System

# **F-DC POWER**



Support scalable server expansion in data center  
Effective implementation to existing power distribution



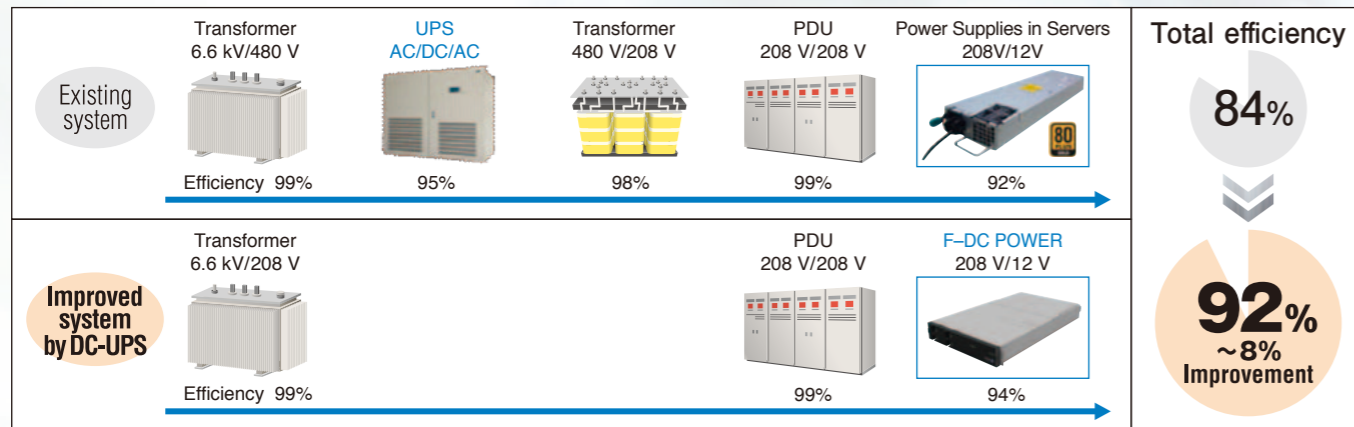
# Contribute to support optimized design and power performance of Data Centers

F-DC POWER supports wide range of server systems (5 kW~) by scalable power supply configuration with high availability

Key features:

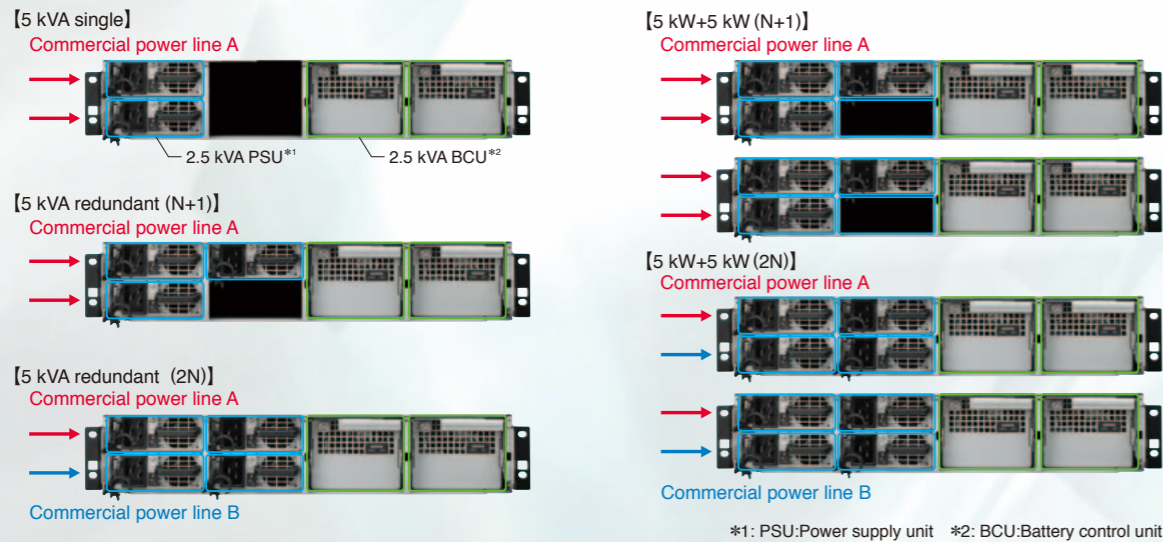
## 1 High efficiency

8% improvement of total efficiency by high efficiency power supply units and reduction of conversion steps through the electricity feeding.



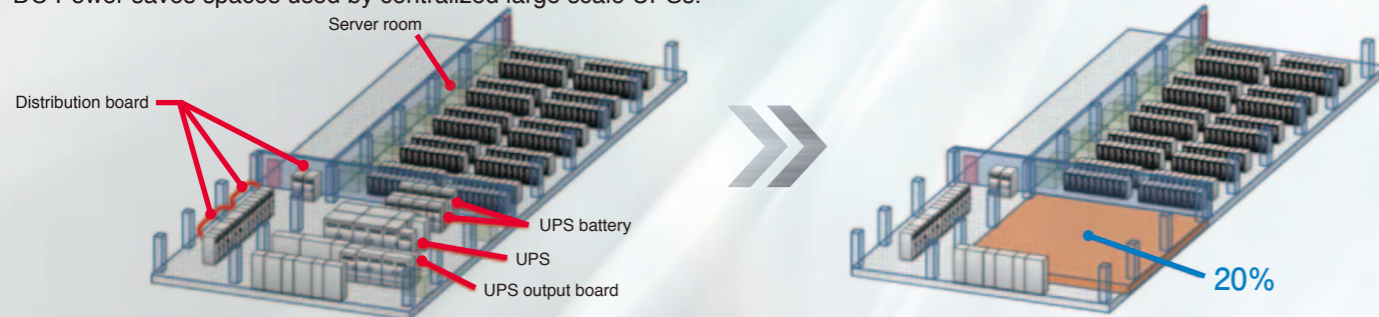
## 2 High reliability

It support dual power receiving and redundant of Power Supply Unit (PSU) and Battery Control Unit (BCU). The PSU and BCU can change or add without system shutdown(Hot swappable).



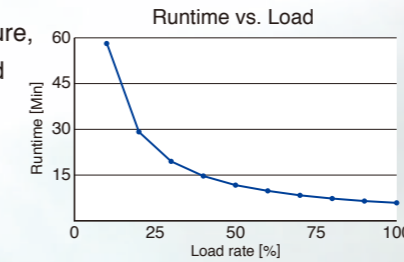
## 3 Space saving

F-DC Power saves spaces used by centralized large scale UPSs.



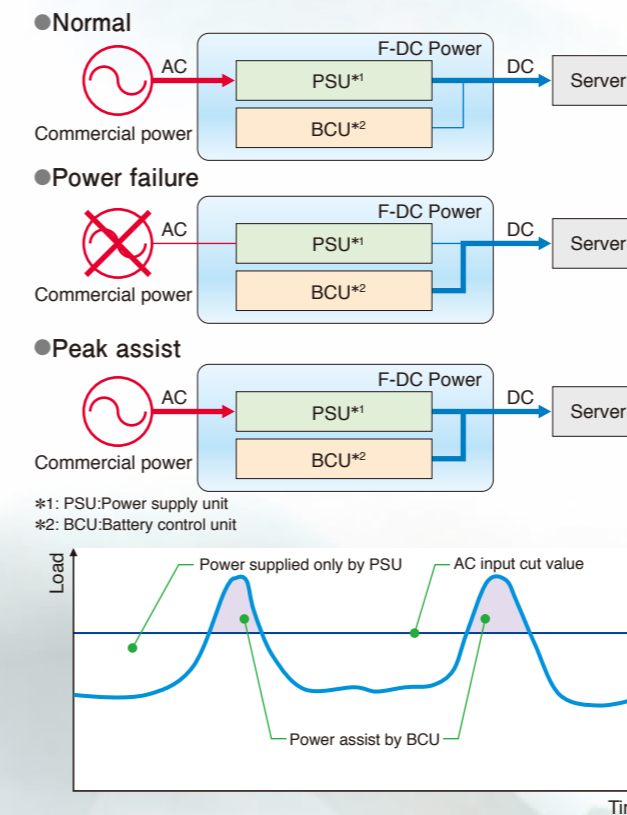
## 4 Backup for power failure

In case of power failure, DC power is supplied from internal BCU.

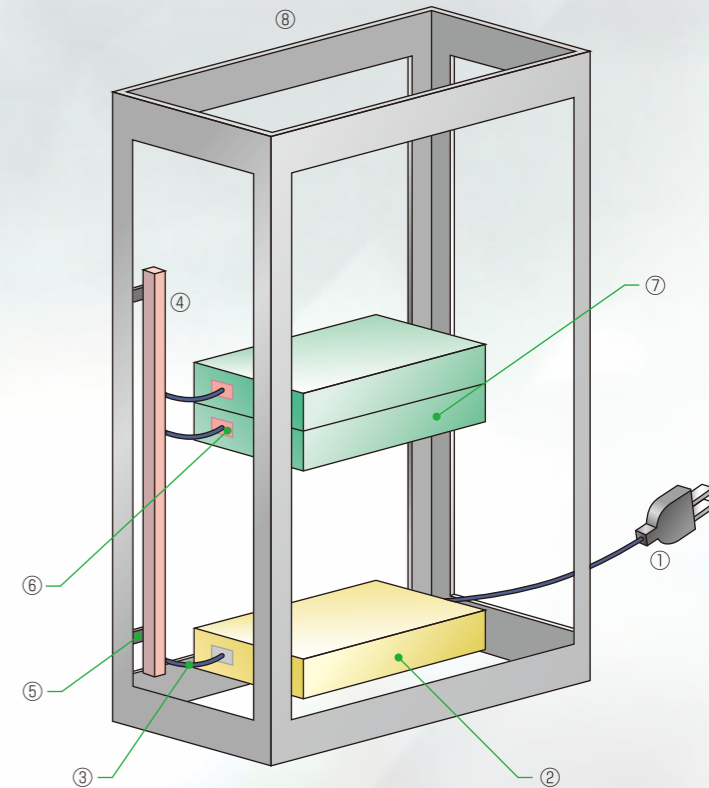


## 5 Peak assist function

BCUs assist PSU power to cover required load power. AC input power(at PSU) can be controlled.



## 6 System peripherals

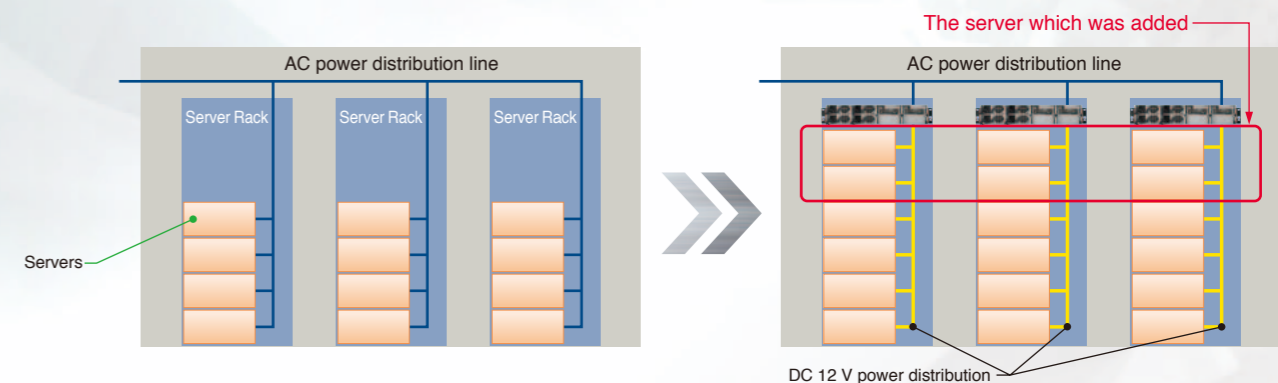


	Product name	Quantity	Description
①	AC power input plug	3	1-ph AC208 V to PSUs C19
②	F-DC POWER	1	4 PSU slots, 2 BBU slots
③	DC12 V output cables	1	Maximum 400 A
④	DC12 V Bus-bar	1	Maximum 500 A
⑤	Mounting bracket		Connect DC bus line to server rack
⑥	DC server-supply cables		Selection by current
⑦	Server		12 V DC-Servers
⑧	Server rack		19" EIA standard

## 7 Easy implementation

F-DC POWER system can be used existing AC power distribution infrastructure.

Peak assist function supports more server installation without additional investment of infrastructure.

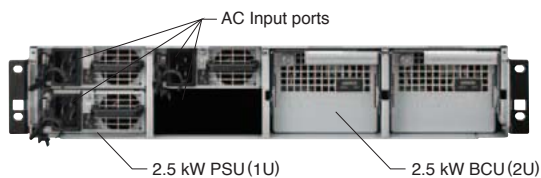




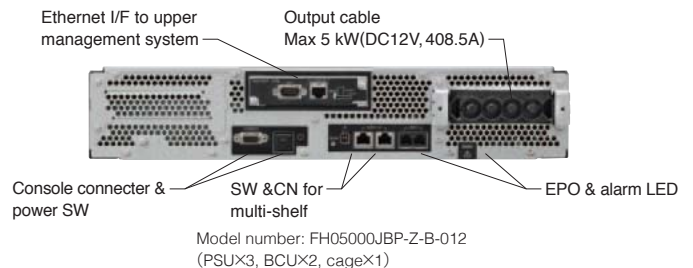
## General specifications

項目	Specifications
Input voltage	200 to 240 VAC ±10% (180 to 264 VAC)
Input current	Rated 27.8 A (@AC200 V)
Input frequency	47 to 63 Hz
Inrush current	< 80 A
Input leakage current	5.0 mA
Efficiency of PSU	90% @20% Load 94% @50% Load 91% @100% Load
Power factor Correction	0.95 and higher (100%Load)
Output voltage	12.25 V (controlled between 12 V to 12.5 V)
Output current	408.3 A Max. 0A Min.
Output power	5 kW
Output ripple voltage	200 mVp-p max
Overshoot / under shoot	0.5 V / -0.6 V
Backup voltage	12.18 V
Backup power	5 kW (10 to 40°C)
Backup current	5 min (End of life (5 years) 4 min)
Operating temperature	0 to 40°C
Operating relative humidity	5 to 95%
Operating elevation	3000 m
EMI	VCCI Class A, FCC-A, CISPR-A
Harmonic noise	IEC61000-3-12
Safety	IEC60950-1 (CB report) UL60950-1 2nd
Cooling system	Forced air cooling (40 mm fan, PWM rotation speed control)
Dimension (Width × Height × Depth)	450mm × 89mm × 740mm
Mass	40 kg (PSU 3 units + BCU 2 units + cage)
Input connector	C20 Inlet × 3
Output connector	In-line quad drawer (TE)
Anomaly detection alarm	Output OVP / UVP / OCP / THP Battery over charge/ over discharge/ notice of life / battery low

### ● Front



### ● Rear



## System structure

Product name	Model number	Description
F-DC POWER 5 kW	FH05000JBP-Z-B-012 / □* / RF	5 kW(N+1) system: PSU×3, BCU×2, cage×1
Power supply Unit (PSU)	FH02651UAD-Z-B-012	2.5 kW DC12 V
Battery control Unit (BCU)	FH02650JBU-Z-B-012	2.5 kW 5 min Back up Li-ion battery unit
Power cage (Cage)	FH05000JBK-Z/RF	Cage of PSU, BCU (with state monitoring function)

\*: □=L Output takeoff is the left side

□=R Output takeoff is the right side

When I watch F-DC POWER from the front, as for right and left, the external representation becomes L model

**Fuji Electric Co., Ltd.**

Gate City Ohsaki, East Tower, 11-2, Osaki 1-chome, Shinagawa-ku, Tokyo 141-0032, Japan  
Phone : (03)5435-7111

Internet address : <http://www.fujielectric.co.jp>

Information in this catalog is subject to change without notice.

2016-4(D2016/D2016)OD2FOLS Printed in Japan