e-Front runners

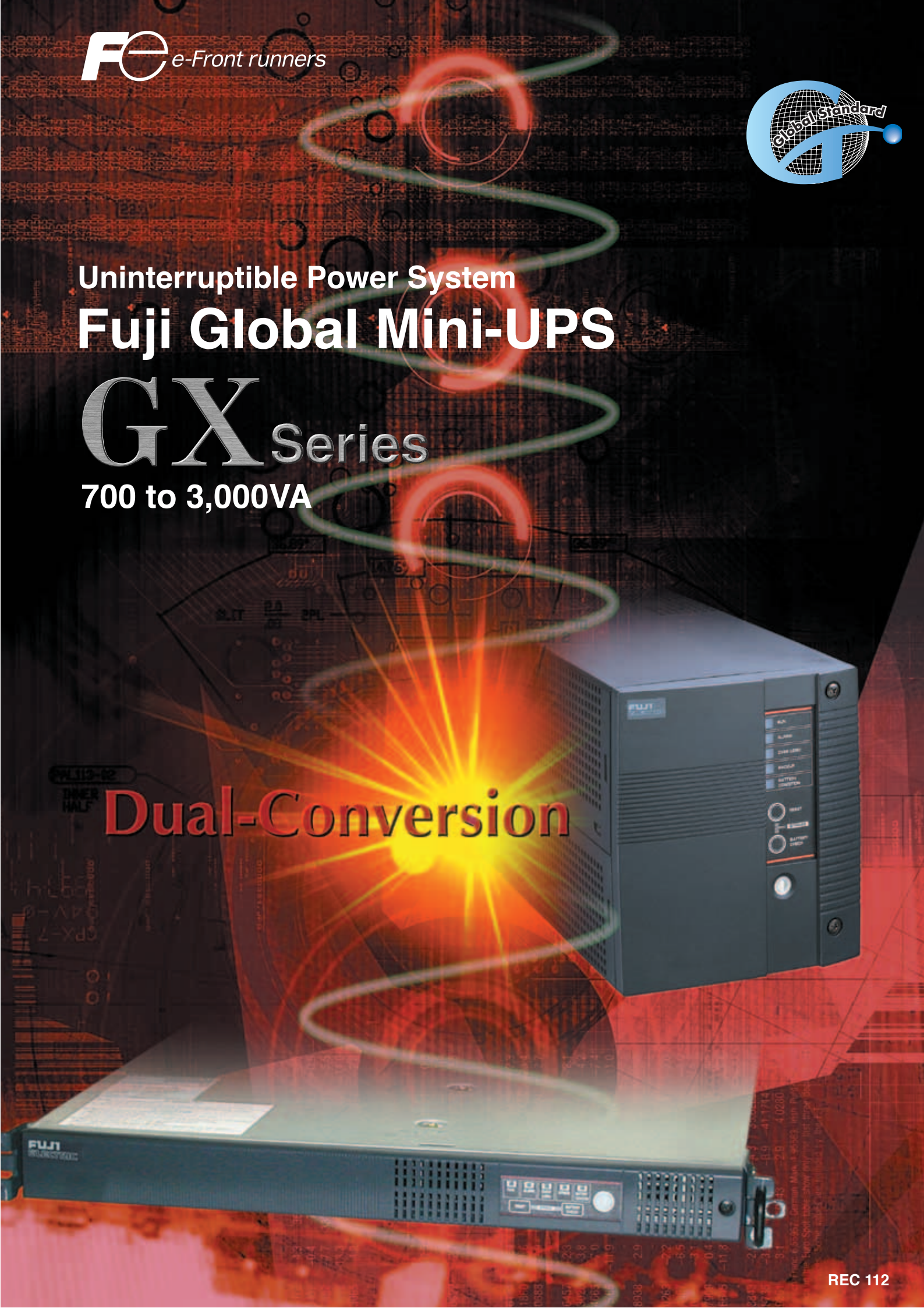
Global Standard

Uninterruptible Power System

Fuji Global Mini-UPS

GX Series

700 to 3,000VA



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UPS Evolving to New Generation GX Series

As sophisticated information systems spread throughout society, the stability of such systems is of paramount importance. Uninterruptible power supplies (UPS) have thus become essential for system control in order to protect mission-critical facilities such as information systems and network equipment from power interruptions and other power troubles.

As the use of UPS has spread, its technologies have progressed significantly, including product reliability, downsizing, and network linking.

Fuji Electric's innovative dual conversion system marks a new generation of UPS.

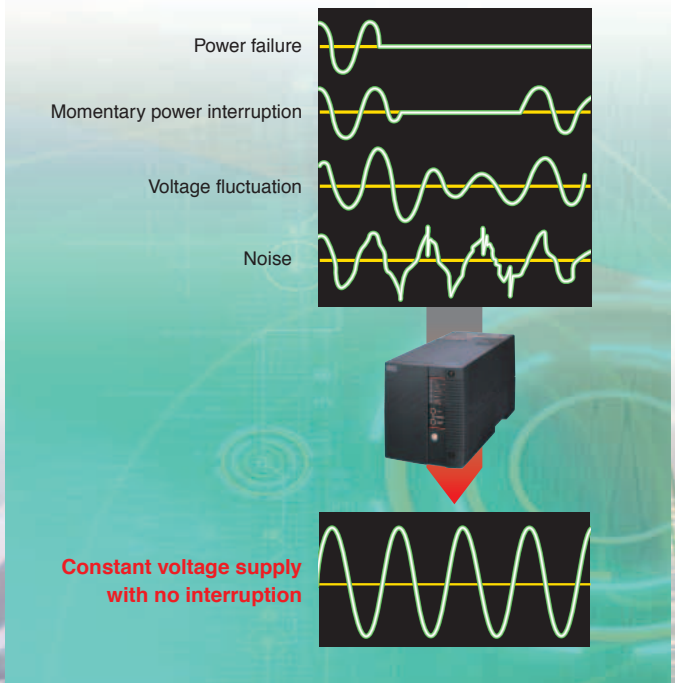
High-reliability UPS
Dual Conversion System

This is a new system offering the advantages of both inverter power supply and utility power supply in the normal status (patent pending).

Highly Reliable Output Stability

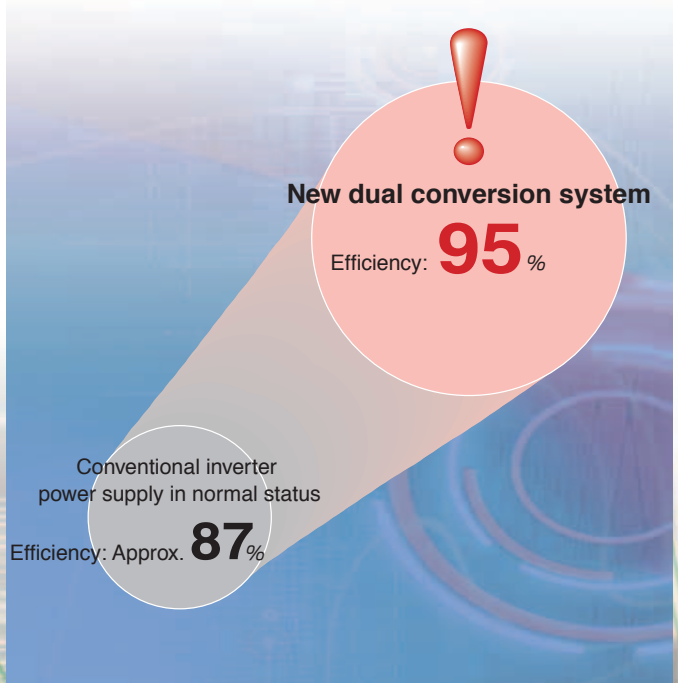
■ Even during changeover to battery power supply due to a power failure, the load is backed up with no momentary interruption.

■ Stable voltage output is ensured even if the input voltage fluctuates.



High Energy Efficiency

■ Novel, unique circuitry yields a high efficiency (95%) with minimum power loss.



GX 700VA self-standing
1400VA self-standing
3000VA self-standing

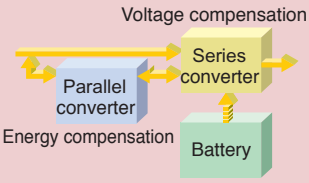
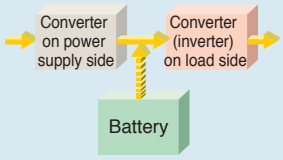
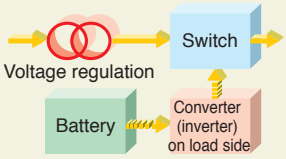
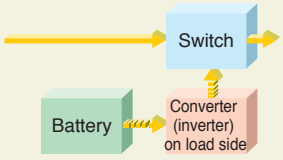
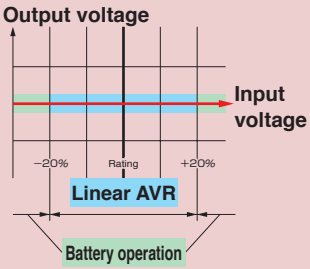
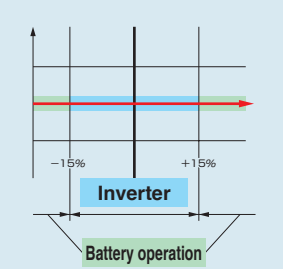
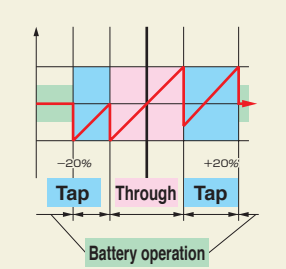
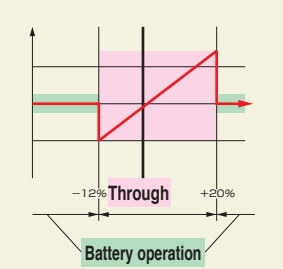
GX 700VA rack-mounting
1400VA rack-mounting
3000VA rack-mounting

Features of GX Series

Dual Conversion System

■ Output stability equivalent to inverter power supply in normal status
■ High efficiency (conversion efficiency 95%)

■ Comparison with conventional systems

		Dual conversion system	Inverter power supply in normal status	Utility power supply in normal status	
				Line interactive (Tap changeover)	Offline
Output characteristics favorable for load		 GX series	 Fuji Electric's J series		 Fuji Electric's Netpower Protect series
					
High accuracy output	Voltage fluctuation	±3% in normal status ±3% at power failure	±2% in normal status ±2% at power failure	±10% in normal status ±5% at power failure	+20%, −12% in normal status ±3% at power failure
	Changeover time at power failure	No interruption	No interruption	4 to 10ms	4 to 10ms
High efficiency		95%	87%	95%	97%

Specifications

Item				700VA	1400VA	3000VA
Model	Self-standing			M-UPS007AD2S-UL (CE)	M-UPS014AD2S-UL (CE)	M-UPS030AD2S-UL (CE)
	Rack-mounting			M-UPS007AD2R-UL (CE)	M-UPS014AD2R-UL (CE)	M-UPS030AD2R-UL (CE)
Operation system				Dual conversion system		
AC input	Rated voltage (200V system)			200V±20%, 220/230V±25%, 240V±20%		
	Number of phases/wires			Single phase/2 wires		
	Frequency			50/60Hz		
	Max. input current			5A	10A	21A
AC output	Rated output capacity			700VA/450W	1400VA/1120W	3000VA/2400W
	Number of phases/wires			Single phase/2 wires		
	Output voltage			200/220/230/240V±3%		
	Output frequency			50/60Hz±0.1% (in backup operation)		
	Waveform			Sine wave		
	Changeover time at power failure/recovery			No interruption		
	Straightforward bypass circuit			Provided		
Battery	Type			Small-sized sealed lead-acid battery (long life type)		
	Backup time			5 minutes (at rated load, ambient temperature 25℃, initial characteristic)		
	Charging time			3 hours (under rated load, up to 90%)		
	Nominal voltage			24V	48V	96V
	Battery replacement			Replacement from UPS front (hot-swap allowed)		
Receptacle	200V system	Input		IEC-320-C14 inlet	IEC-320-C14 inlet	Terminal block (M5 screw)
		Output	Self-standing	IEC-320-C13×4	IEC-320-C13×8	IEC-320-C13×8
			Rack-mounting		IEC-320-C13×4	IEC-320-C19×1
Option card slot				Provided (standard interface board mounted)		
Ambient conditions	Ambient temperature			0 to +40℃ (altitude: 1500m max.) 0 to +35℃ (altitude: 1500 to 3000m)		
	Relative humidity			20 to 95% (no condensation)		
	Noise		Self-standing	40dB (A) max.	45dB (A) max.	
			Rack-mounting	45dB (A) max.		
	Cooling method		Self-standing	Natural air cooling	Forced air cooling	
			Rack-mounting	Forced air cooling		
External dimensions	Self-standing (W×D×H)			137×358×158mm	170×480×216mm	190×530×432mm
	Rack-mounting (W×D×H)			482×680×43 (1U) mm	482×680×43 (1U) mm	482×680×87 (2U) mm
Mass (weight)	Self-standing			8.5kg	20kg	40kg
	Rack-mounting			18kg	25kg	40kg
Applicable standard				CE-marking, UL1778 (under preparation)		

Installation Conditions

- This unit is designed to be used indoors.
  Do not install in a place exposed to direct sunlight, wind or rain.
- In case of the forced air cooling specification, secure a space of at least 10cm behind the UPS for normal cooling.
- Avoid a dusty, hot and/or humid place.
- This unit should be used at an operating temperature of 25℃ or lower.
- Do not use this unit for the following:
  - Medical equipment, etc. which directly affects human life
  - Equipment which may cause human injury
  - Computer systems of social or public importance

  When used for such equipment, special measures must be taken for the running, maintenance and control, such as system duplication and installation of emergency power generation equipment.
  Contact Fuji Electric in advance.

Maintenance

The battery requires periodic replacement (according to a regular schedule).

- Although the battery does not require daily maintenance, its service life will be shortened if the ambient temperature rises (a rise of 10℃ will reduce the life by half). The battery life also varies with the ambient conditions.
- If the battery continues to be used after reaching the end of its service life, not only will the UPS fail to provide backup operation in the event of a momentary voltage drop or power failure, but also secondary troubles such as odor or fumes may be generated.
- For periodic preventive replacement, it is recommended to make a contract for overhaul maintenance.

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