

Customization Oriented High Stability High Reliability

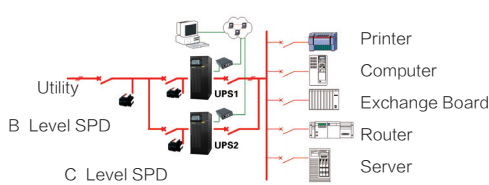
Typical applications:

- Industrial application
- Semiconductor plant
- Computer room
- Data center
- Precision instrument
- Intelligent equipment



FR-UK33 Series 10-160kVA

FR-UK33 series UPS is Kehua's historic UPS, it brings a new choice for your critical applications. Thanks to 20 years of research and development experience, FR-UK33 series UPS can be applied to wide application solutions as they possess high cost-effective advantages. With optional dual mains input and a built-in maintenance bypass switch, the system's stability is highly increased. Featuring with upgraded IP grade, replaceable filter screens and back-feed protection, FR-UK33 series UPS satisfies your demands in industrial environments. In addition, customization products are available for special requirement.

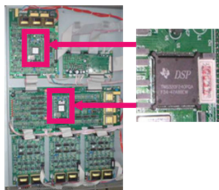


Parallel System Application

Features and Advantages

High reliability

- Standard output isolated transformer
- 3 x 2 redundant power design
- No-master-slave N+1 parallel technology (Maximum 6pcs in parallel in real application)
- PCB boards feature with anti-corrosion paint coating



Double DSP and full digital control

High performance

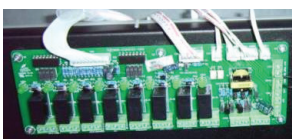
- $\pm 25\%$ input Voltage
- 40-70Hz Frequency (Mains)
- Double DSP and full digital control
- International IGBT power modules
- Allow 100% three phase unbalance load

Maximum protection

- Overload protection
- Reverse polarity protection
- High input voltage protection
- High/Low output voltage protection
- Short-circuit protection
- Over temperature protection
- Battery overcharge protection

Smart management

- Intelligent RS232/RS485
- Battery management
- Multi-functional settings to view parameters
- 1000pcs events logs
- 8+6 dry contact communication signals



8+6 dry contact communication signals

Added-value Service and Customization

Harsh industrial environments

- Strong enclosure
- Shield box protection
Control boards can be dust-proof and anti-interference
- Replaceable filter screen
Prevent dust and debris from affecting ups performance
- IP31
Prevents liquids and debris from entering the UPS

Intelligent battery monitor system – MMBM-3

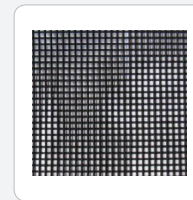
- Real time monitoring parameters
- Smart diagnosis status
- Real time abnormal alarm
- Record and save events logs

Flexible network management

- Optional SNMP adapter
- Emergent alarm via SMS/Email
- Modbus for remote management

Customized design

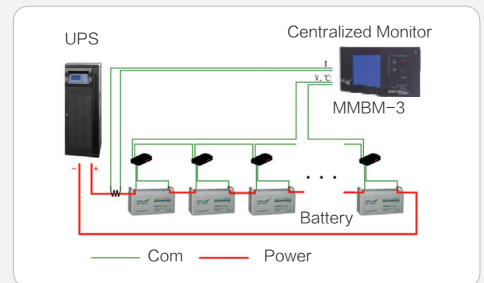
- Fancy touch screen
- External bypass cabinet
- Input/Bypass isolation transformer
- 12 Pulse rectifier & Active/Passive filter
- Temperature compensation sensor
- Energy reverse absorber for industrial applications (Back-feed protection)



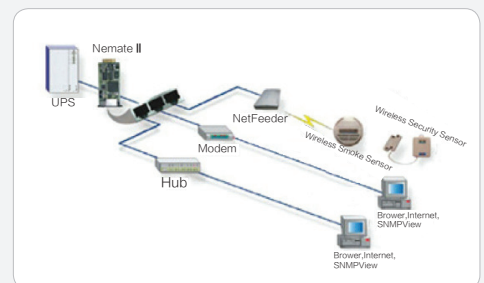
Filtering Screen



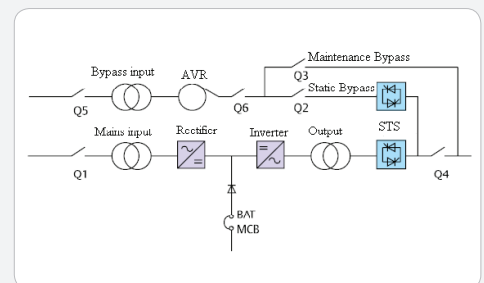
Fancy Touch Screen



Intelligent Battery Management System



Flexible Network Management



Customized Design Structure

Technical Specifications

ModelName		FR-UK 3310	FR-UK 3320	FR-UK 3330	FR-UK 3340	FR-UK 3350	FR-UK 3360	FR-UK 3380	FR-UK 33100	FR-UK 33120	FR-UK 33160	
I N P U T	Voltage(Vac)	380/400 ± 25%										
	Rectifier Frequency(Hz)	40 ~ 70										
	SYNC Frequency Tracking(Hz)	50/60 ± 5% (± 10% optional)										
	Phase	3 φ 4W+PE										
	Dual mains input	Optional										
O U T P U T	Capacity (KVA/KW)	10/8	20/ 16	30/ 24	40/ 32	50/ 40	60/48	80/ 64	100/80	120/96	160/128	
	Power Factor	0.9 (0.8, 1.0 optional)										
	Phase	3 φ 4W+PE										
	Voltage (Vac)	L - N: 220/230 ± 1%, L-L:380/400 ± 1%,										
	Frequency(Hz)	50/60 ± 0.5% (battery mode)										
	Waveform	Pure sine wave, THD ≤ 3% (linear load)										
	3 Phases 100% Load Unbalance Voltage Stability	≤ 2%, allow 100% unbalance										
	Efficiency (AC-AC)	92%										
	Overload	<105%long time working, 105%~130%load for 10 min, 131%~150%load for 1min.										
B A T T E R Y	Voltage (Vdc)	12V × 29=348										
	BATT Type	External										
	Charging Current(A)	10~40A setting										
	Battery Self-testing	Automatically alarm and estimate battery status in battery abnormal status										
O T H E R	Maintenance Bypass	Yes										
	Communication Interface	RS232/RS485 and dry contact (MODBUS and SNMP adapter are optional)										
	Display	LCD Display indicates frequency, voltage, load, battery voltage, etc. LED indicates running status										
	Alarm	Overload, abnormal AC input, low battery, UPS failure										
	Protection	Low battery, overload, over temperature, short circuit, output over voltage, output low voltage										
	Noise (dB)	< 65										
	Protection Class	IP20 (IP31 optional)										
	Approvals	CE (EN 62040-2, IEC 62040-1)										
	Working Temperature	0 ~ 40°C										
	Relative Humidity	0 ~ 95%, No condensation										
	Dimension (W × D × H) (mm)	500 × 800 × 1180			800 × 800 × 1600				1000 × 800 × 1800			
	Weight(Kg)	200	240	290	450	470	490	690	725	775	905	

◆ Specifications are subject to change without prior notice.



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