Power Quality Management Solution

---Professional solution

Allen
+86 13213122992
allen@compere-power.com

配电互联 绿色能效

Distribution interconnection Green energy efficiency

Solution

PUMG830
microcomputer integrated protection and monitoring device

KPM204
gateway

T@Energy Wisdom energy management system

KPM75 power quality analyzer

KPM73
3 phase
power meter

KPM53
3 phase
power meter

KPM51
Single phase
meter

KPM60
Motor
protection
relay

KPM33
Rail energy meter

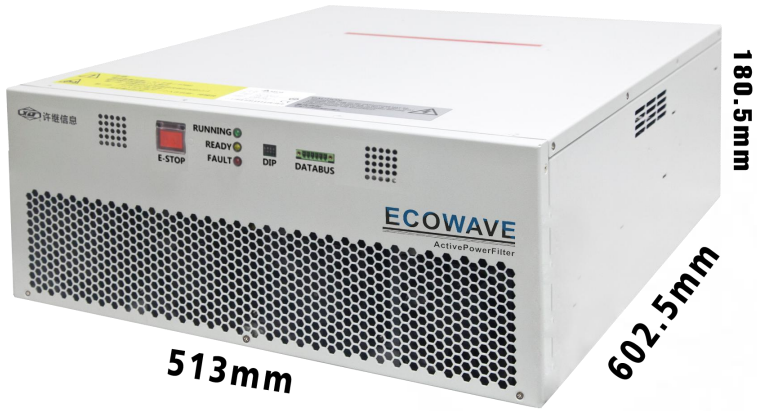
Integrated filtering

APF

Compensation filter unit

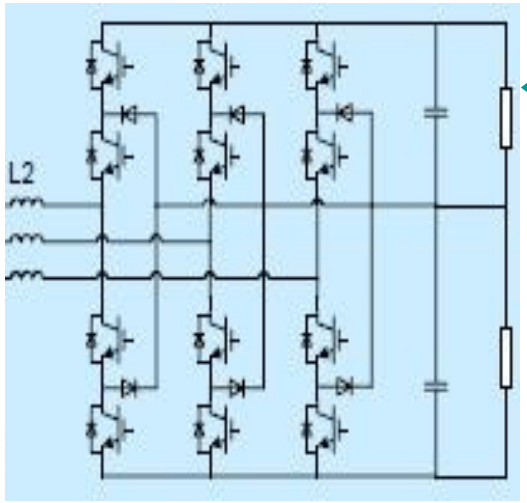
Power Quality Management Solution

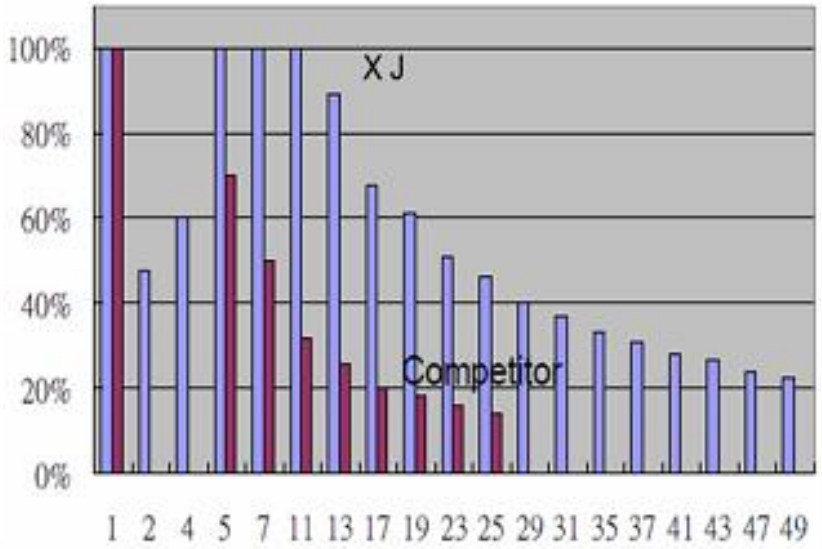
EcoWave series active filter



- Modular design, good scalability
- Switching frequency: 60KHZ, filtering rate: 98%
- Three-level topology, heat loss ≤ 2.5%
- Fast response, fast harmonic extraction algorithm
- Electromagnetic compatibility (EMC), international Class A standard
- Strong environmental adaptability, suitable for industrial grade

EcoWave series active filter



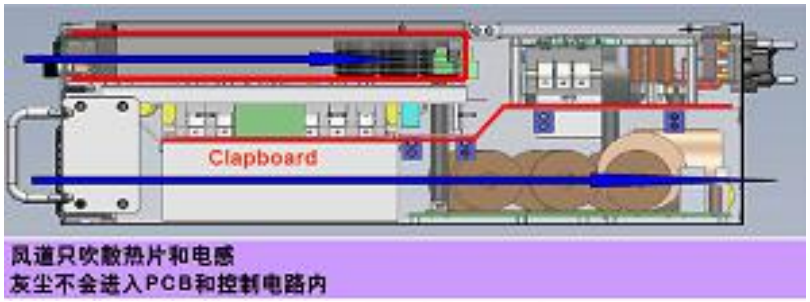


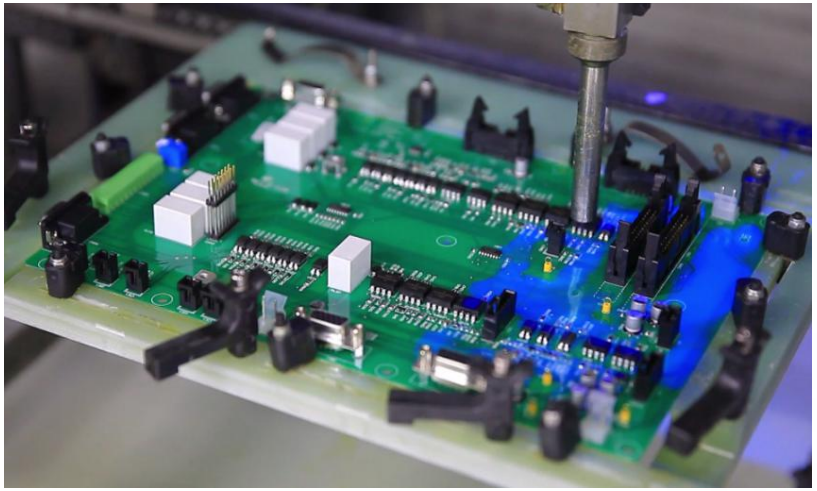
Three-level design, switching frequency up to 60KHZ

- ✓Smaller reactance→ Smaller harmonic output impedance→ Stronger higher harmonicoutput capability；
- ✓Faster response(<10ms)；
- ✓More accurate filtering performance；
- ✓Smaller reactance loss→Smaller machine loss(<2.5%)；
- ✓Better electromagnetic compatibility (EMC) to prevent high frequency interference.

EcoWave series active filter

Strong environmental adaptability, suitable for industrial applications





- ✓Working environment temperature -10℃~+50℃.
- ✓Input voltage range 400±20%, input frequency range 50/60Hz ±10%.
- ✓Can withstand high voltage harmonics, still work when THDu is up to 35%.
- ✓Independent air duct and PCB coating process designed to withstand smoke and corrosive sites;
- ✓The system cabinet is equipped with Class C lightning protection as standard to suppress the effects of surges and lightning strikes.
- ✓Can withstand magnitude 9 earthquake.

Model Description

Eco Wave -□/□L/□

- Rated voltage(V): 400V(default)/690V
- 3: 3-phase 3-wire. 4: 3-phase 4-wire
- Compensation current(A) 50/75/100
- Active fiter

System voltage level	Industrial field	Construction, public facilities, etc.
400V	EcoWave-50A/3L	EcoWave-50A/4L
	EcoWave-75A/3L	EcoWave-75A/4L
	EcoWave-100A/3L	EcoWave-100A/4L
690V	EcoWave-100A/690/3L	/

Technical Parameters of Eco Wave					
Electrical characteristics	Rated voltage	400±20%			660V AC
	Rated current	50A	75A	100A	100A
	Rated frequencyt	45~55HZ			
	Harmonic	2~50th			
	Harmonic compensation efficiency	≥98%			
	Compensation mode	Reactive 100%, harmonic 100%, reactive + harmonic (preferably optional), specified harmonic			
	Reactive power compensation capability	Static / dynamic compensation, power factor adjustable			
	Load balancing capability	Partial/full compensation, interline/phase compensation			
	Response time	＜10ms，（moment）＜0.1ms			
	Soft start time	10~60s（optional）			
	Power-down restart time	10~60s（optional）			
	Active loss	＜2.5%			
	Parallel operation	Up to 7 units			

Control method	Switch frequency	Up to 60KHz
	Protection method	Input over/under voltage, phase loss, over current, over temperature, DC bus over/under voltage, overload current limit
	Controller	External control display panel (optional)
	Communication interface	RS485/RS232/ethernet, Host computer communication software
	Operating mode	Manual or Automatic
Structure features	Protection level	IP20(default) or customizable
	Colour	RAL7035(customizable)
	Cooling method	Forced cold wind
	Cabinet structure	Modular
	Installation method	Indoor installation, Wire feeding mode(optional)
Environmental conditions	Ambient temperature	-10℃~50HZ℃
	Humidity	≤95%, No condensation
	Altitude	＜1000m
Standard	EN50178-1997, EN61000-6-2(2005), EN50061-3	

SmartPower Static var generator

SmartPower Static var generator-**Features**

- **Voltage level**：400V
- **Rack mount**：Dimensions: 444.5x174x522(mm)，Single compensation capacity 50kvar；
- **Modular SVG**
  - Easy to install or embed in standard cabinet systems; can be mixed
  - Each module works independently, with greater product redundancy and reliability
  - The maximum capacity of a single cabinet is 450kvar, and the parallel connection of 2 cabinets can cover the compensation requirements of all low-voltage power distribution systems.
  - CT detection signal is connected in series to each parallel module to achieve better module current sharing characteristics
  - Independent operation display panel (optional)
  - MTBF：≥300,000 hours

SmartPower Static var generator- **Effect**

- **Multiple effects**：Compensate for power factor, eliminate harmonics and three-phase imbalance;
- **Wide input voltage and frequency range**：Suitable for domestic power grid fluctuations, and compatible with diesel generators, continuous reactive power compensation and harmonic filtering can be performed when the oil machine outputs.
- Stability: infinite impedance to the grid; accurate output waveform, does not affect other equipment
- Actual efficiency: low power consumption (less than 2.5% of rated power, actual efficiency >97.5%).

SmartPower Static var generator- **Effect**

- Fast response: dual DSP control, real-time tracking, dynamic compensation, full response speed <10ms;
- Two-way compensation: realizes inductive and capacitive two-way compensation, continuous reactive power compensation, error less than 1%.
- Real-time flexible monitoring: communication interface RS485/232 and CAN bus, computer remote monitoring, easy centralized control management, support remote switch machine
- Perfect function setting: self-test start, soft start time can be set, emergency shutdown and system protection function.
- Chinese&English operation interface: event and EEPROM fault record

Model Description

SmartPower -□ /□ L

- 3: 3-phase 3-wire. 4: 3-phase 4-wire
- Compensation capacity(kva) 50/75/100
- Static var generator

Technical Parameters of SmartPower		
Electrical characteristics	Rated voltage	380V AC ± 20%
	Rated frequencyt	50HZ ± 10%
	Compensation mode	3-phase 3-wire, 3-phase 4-wire.
	Degree of filtering	Compensate for harmonics within 13th.
	Harmonic treatment rate	≥97.5%
	Reactive power compensation capability	Static or dynamic, compensationPF=1, Or accurate compensation based on the set PF target value.
	Supported load types	Inductive load, resistive load, phase-to-phase load (3-phase 3-wire).
	Dynamic response time	Full response time＜10ms
	Heat loss	＜2.5%(Full load)
	Protection function	over/under voltage, phase loss, environment overheating, overload short circuit, IGBT overheating, automatic restart setting.
	Power quality compensation function	Compensates for reactive, harmonic, three-phase unbalance, and voltage fluctuations and flicker.

Controll features	Controller	Double DSP
	Communication method	Modbus RS485/RS232/iterface, CAN bus
	Control connection	Fiber or electrical connection
	Parallel units	8 units
Structure features	Protection level	IP21(default) or customizable
	Cooling method	Forced cold wind
	MTBF	＞300000 hours
	Installation method	Integrated installation
Environmental conditions	Ambient temperature	-10℃~50HZ℃
	storage temperature	-20℃~65HZ℃
	Altitude	＜1000m, derating is required when it is greater than 1000m
Weight	47kg	
Dimensions	W*H*D(mm)	536*182*734
Standard	EN50178-1997, EN61000-6-2(2005), EN50061-3	

Typical performance——Industrial field

Automotive manufacturing

Pharmaceutical Industry

Alumina manufacturing

Equipment manufacturing

Steel manufacturing

Typical performance——Commercial filed

华润万家 vanguard

Large supermarket

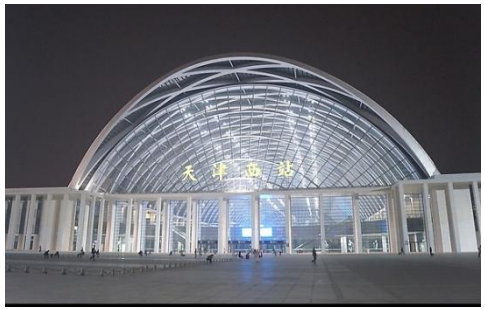
大商集团

绿地®集团
中国驰名商标|中国百强企业

Real estate

GOLDEN RESOURCES
世纪金源集团

Typical performance——Public utilities field



High Speed Rail Station

Hospital

Airport

Library

Museum

桑德集团 sound group

Energy use, environmental services

Certificates

Thank You