

FPU Series Active Power Filter



cabinet type

Wall-mounted

Rack mounted

Excellent filtering performance

Simultaneously filter out 2 ~ 50 harmonics;
Odd-even comprehensive control;
Arbitrary single harmonic ratio setting.

High quality of core devices

Infineon IGBT imported from Germany, advanced three-level technology;
American TI's high-end industrial control chip (28377), dual-core 32CPU + 2CLA, clocked at 200MHz.

Flexible application solution

Modular design, lightweight wall-mounted, custom plug-in type;
Any combination of various capacity modules, up to 10 modules can be connected in parallel;
The CT can be flexibly installed on the power supply side or the load side.

Complete equipment and system protection

Resonance protection;
External electrical fault protection of the equipment;
Equipment internal fault protection, overcurrent protection, IGBT overheating protection etc.;
Automatic derating when the working environment exceeds the limit.

Fully featured

Multiple compensation modes, active filtering, reactive power compensation, unbalanced current compensation
Full range stepless compensation of reactive power;
Complete three-phase unbalance compensation strategy, realizing active / reactive / phase unbalance compensation.

User friendly interface

Through the graphical display interface, users can clearly understand the power quality improvement of the system before and after the compensation, such as the system waveform diagram, harmonic spectrum diagram, THDi, THDu, current RMS value and power factor.

Product specification	30A	50A	75A	100A	150A	cabinet type
System parameters						
Grid voltage	400V/690V (-40%,+20%)					
Rated frequency	50/60±5%Hz					
Wiring system	Three-phase three-wire/Three-phase four-wire					
Circuit topology	Three-level					
Performance index						
Rated current	30A	50A	75A	100A	150A	cabinet type
Compensation mode	Implementing Harmonics, reactive power ,Any combination of imbalance compensation					
Harmonic compensation capability	2 ~ 50th harmonic compensation, eliminate all or selected harmonics					
Harmonic order setting	Individual setting of each harmonic					
Harmonic compensation efficiency	Greater than 97%					
Reactive power compensation	Capacitive full range reactive power compensation					
Three-phase unbalance compensation	Have					
Full response time	≤5ms					
Machine efficiency	> 97%					
Parallel operation capability	Supports up to 10 modules in parallel					
CT parameters	Primary side current 100 ~ 10000A, secondary current 5A (1A optional)					
CT position	Load side or power side					
Protection method	Grid over and under voltage, grid over and under frequency, input voltage reverse order, over current, over heat, overload automatic current limit protection, bus short circuit					
cooling method	Intelligent air cooling, automatic adjustment of air volume according to heat dissipation conditions and load					
noise	≤65dB					
Communication						
Protocol	Modbus protocol					
Communication Interface	RS485/RS232 /Ethernet(optional)					
Monitoring module	2.8 Inch LCD screen					8 Inch LCD touch screen monitoring components
Display content	Real-time running information such as voltage, current, frequency, power factor, waveform curve, parameter setting, record query, etc.					
Mechanical properties						
IP rating	IP20 (others can be customized)					
Dimension	refer to mechanical characteristics for details					Specific reference Cabinet capacity
Weight	refer to mechanical characteristics for details					
Color	RAL7035					
Environmental requirements						
Operating temperature	-25°C~+50°C, derating above 40 °C					
Relative humidity	5%~95%, no frost					
Relative humidity	2000m, exceeding derating operation					
Related qualifications						
Certification	CQC certification, type test report					