

FPU Series Active Power Filter



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

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.

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.

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 | cabinet type |
|------------------------------------|--|-----|-----|------|---|
| System parameter | | | | | |
| 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 | 0~500A |
| 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 Interfac | 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 standard | | | | | |
| Certification | CQC certification,type test report | | | | |