

# SPC Series Intelligent Power Quality Correction Device

**Comprehensive functionality**  
Completely solve the problem of three-phase unbalance; Improve the power factor of power distribution network.

**High quality**  
Germany imported IGBT, advanced three-level technology; American TI top control chip.

**Excellent performance**  
Degree of unbalance <5%; Smartbidirectional fast stepless regulation reactive power; complete machine efficiency  $\geq 97\%$ .

**Smart and friendly**  
Intelligent temperature control, intelligent speed control fan; Multiple communication methods supported, professional APP control, more convenient and fast operation.



## Product overview

SPC series Smart Power Quality Correction Device is a new type of power electronic device dedicated to improving the power quality of the distribution station area. Based on advanced three-level inverter technology, the device uses intelligent algorithm control to effectively compensate three-phase imbalance in real time, intelligently adjusts reactive power in both directions, achieves three-phase output power balance of the transformer, and improves the power supply quality in the distribution station area.

Specifications	30kvar	50kvar	75kvar	100kvar	150kvar	200kvar
<b>System parameters</b>						
Grid voltage	400V (-20%,+20%)					
Rated frequency	50/60 $\pm$ 5%Hz					
Wiring system	Three-phase three-wire, three-phase four-wire					
Circuit topology	Three level					
<b>Performance index</b>						
Reactive power compensation capacity	30kvar	50kvar	75kvar	100kvar	150kvar	200kvar
Reactive power compensation range	Continuously adjustable capacity					
Three-phase unbalance compensation capability	Mbalance degree <5%					
Filtering ability	Low-order filtering (3 times, 5 times, 7 times, 11 times, 13 times)					
Full response time	$\leq 10$ ms					
Machine efficiency	$> 97\%$					
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	$\leq 65$ dB					
<b>Communication and monitoring</b>						
Protocol	Modbus protocol					
Communication Interface	RS485/RS232					
Monitoring module	Standard WiFi component (controlled by APP), optional Bluetooth component / GPRS component					
Display content	Real-time running information such as voltage, current, frequency, power factor, waveform curve, parameter setting, record query, etc.					
<b>Mechanical properties</b>						
IP rating	IP44 (others can be customized)					
Dimension	Refer to product mechanical characteristics for details					
Weight	Refer to product mechanical characteristics for details					
Color	(Other colors can be customized) / stainless steel					
<b>Environmental requirements</b>						
Operating temperature	-25 $^{\circ}$ C~+50 $^{\circ}$ C, derating operation above 40 $^{\circ}$ C					
Altitude at Full Load	2000m, exceeding derating operation					
<b>Related qualifications</b>						
Certification	CQC certification, type test report					