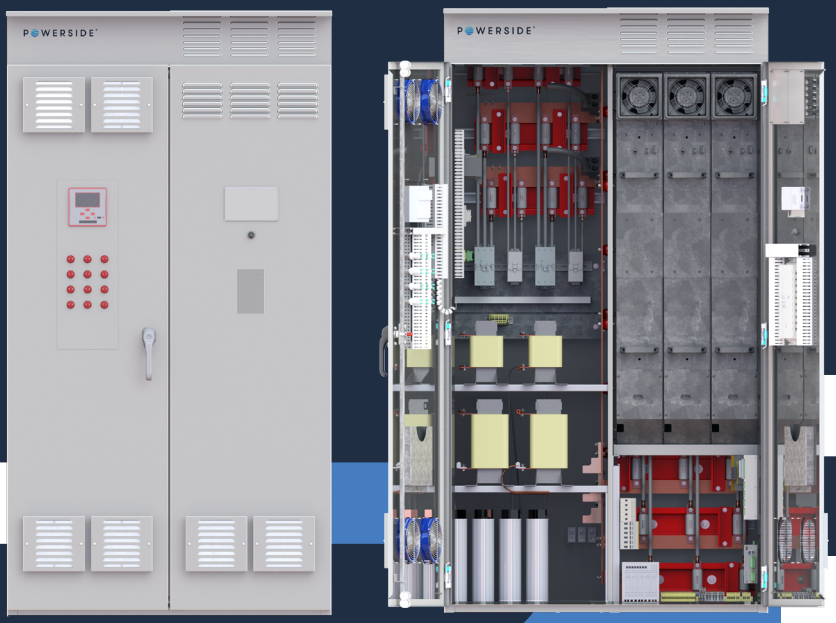
POWERSIDE®

PowerAct Hybrid Filter

An All-in-One Solution for Smarter Power Quality Corrections



Great Things Happen When Technology Works Together.

The PowerAct Hybrid Filter works to correct power quality issues caused by the diverse loads of modern facilities — so all your equipment can work in harmony. A totally customized solution, our hybrid filter delivers right-sized power quality improvement, power factor correction and powerful cost savings for your unique application.

The Best of Two Technologies in One Solution

From sensitive equipment to high-powered machinery — modern facilities have a lot of component parts. And when the effects of unstable loads combine with poor-quality power from the grid, the impacts can be too much for conventional power system correction solutions to handle. The result? Equipment damage and downtime, slowed productivity, increased energy costs and potential penalties.

That's where the PowerAct Hybrid Filter comes in. **This solution combines two technologies — passive and active harmonic filters** — to counteract power quality issues like poor power factor and harmonics while meeting interconnection standards like IEEE 519. So background harmonics and power factor are continuously corrected by the passive component, and the advanced active filter is free to take care of the rest.

Right-Sized Power Quality Corrections in Nearly Half the Space

Combining two solutions in one enclosure means that **our hybrid filters take up 37% less floor space than a traditional two-filter solution** — making them the ideal choice for any application where space is at a premium.

APPLICATIONS

The PowerAct Hybrid Filter delivers performance and cost savings across industries, including:

- **Manufacturing**
- **Agriculture**
- **Food processing**
- **Healthcare centers**
- **Government facilities & institutions**
- **Water & wastewater**
- **Oil & gas**
- **EV charging**

Same Tech — Smaller Price Tag

By leveraging a passive component to reduce demand on the active filter, our hybrid filters provide the most cost-effective balance of economical and advanced technology. Plus, with the need for only one breaker and one set of cables and conduits, **the equipment and labor required for install is cut nearly in half.**

Completely Customizable to Meet Your Needs

Our tailored solutions ensure you get nothing more or less than the exact corrections capabilities your application requires. Our team of power quality experts will help you choose between automatic, fixed, tuned or detuned passive filters and discern the right amount of active filtering for your needs.

The PowerAct Hybrid Filter provides the most economical option for everyday issues with best-in-class technology to back you up.

PowerAct Hybrid Filter	
Compensation Technology	Hybrid (Active and Passive)
Mounting	Floor
Cable Entry Options	Top Entry / Side Entry / Bottom Entry
Nominal Frequency	50 Hz / 60 Hz
Nominal Voltage	208 / 240 / 480 / 600 V
Connection	3 wire (No neutral)
Reactive Power Compensation Capacity	400 kVAR (Passive) + 390 kVAR (Active) @ 600V
Hybrid Capacity (Best of Both)	400 kVAR (Passive) + 375 A (Active harmonic compensation)
Operating Temperature	32° to 104° F (0° to 40° C) without de-rating
Enclosure Rating	NEMA 1 (Option NEMA 3R)
Expandability	Passive: Expandable up to 400kVAR; Active: Modular up to 375 Amps
Power Factor Correction	Fixed and Dynamic
Communication	Modbus; Ethernet; Profibus
Active Side	
Harmonic Compensation	1st to 51st simultaneously
Control Mode	Current control mode; Voltage control mode (no CT/sensors required)
Control Method	Open loop and Closed loop
Inverter Technology	3-Level IGBT with voltage link
Harmonic Filtering Capacity	125 A / 250 A / 375 A
Reactive Power @ 480V	104 kVAR / 208 kVAR / 312 kVAR
Reactive Power @ 600V	130 kVAR / 260 kVAR / 390 kVAR
Load Balancing	Up to 100% of rated current (negative sequence)
Voltage Regulation	Voltage stabilization via Q(U)-control, flicker compensation
Response Time	< 1ms
Power Losses	< 2.1% of compensation power maximum < 1.8% in typical operation; < 0.4% when idle; < 100 W in standby
Cooling	Air cooling with speed-controlled fans
Maximum Voltage	690 V continuous
Passive Side	
Power Factor Correction	Fixed / Automatic / Mixed (Fixed kVAR + Automatic kVAR)
Power Factor Controller	Microprocessor-based with alarm and protection
Filtering	Detuned / Tuned
Switching Options	Contactor or thyristor switching
Reactive Power	Up to 400 kVAR
Maximum Continuous Voltage	110%
Maximum Continuous Current	165%
Maximum Steps	4
Cooling	Air cooling - thermostat controlled
Thermal Protection	Over temperature on reactor core
Protection	Over-current; No-voltage step release; Blown fuse indicator
Enclosure Dimensions	94" H x 48" W x25" D
Enclosure Maximum Weight	2238 lbs.

Benefit from a solution that's cost-, space- and energy efficient. Order your PowerAct Hybrid Filter today.

powerside.com/poweract-hybrid-filter

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