

Ordering information

Who do I call to order ESP products?

Simply call our toll free line to place an order, 1-800-645-9721, or email us at orders@realpowerprotection.com, or fax us at 919-269-0454.

How long does shipping take?

ESP products are usually shipped within 24 hours of receiving your order.

ESP Product Information

What was the Digital QC designed to do?

The Digital QC is an industrial/commercial grade power filter designed to achieve or exceed the no upset ITIC/CBEMA standard. This means that that the Digital QC reduces or eliminates all real time disturbances to a level so low that what gets through a Digital QC will not upset nor disrupt the operations of your sensitive electronics 24/7.

What type of equipment can the Digital QC protect?

The Digital QC has been developed and designed to keep digital imaging systems, multi-function machines, networked print servers, printers and copiers up and running under normal to extreme power conditions without operational disruption.

Digital QC vs. Digital QC Network?

The Digital QC is designed to protect a stand-alone device. Specifying the Network feature adds protection for a modem/fax line and a 10/100/1000 Ethernet network connection. Any system connected to a network needs to have all communication and power lines protected from disruptive or damaging spikes and noise. If you are hooked up to a network, specify the Digital QC Network.

What is the difference between the Digital QC and the MajAC?

The Digital QC gives you protection against operational disruption and protection against hardware damage; the MajAC provides protection against hardware damage (which is a lesser form of protection against operational disruption).

ESP's Digital QC is designed to meet or exceed the no upset level of the ITIC/CBEMA standard. The Digital QC keeps you up and running regardless of the severity of the disturbances on the electrical grid virtually 100% of the time! The MajAC, which incorporates many of the surge suppression components found in the Digital QC, is a true commercial grade surge protector. However, the limitations of both space and economics preclude the inclusion of the same level of noise filtering found in the Digital QC.

Which model is the right one for my equipment?

For maximum uptime and productivity, the Digital QC is the right product to protect your equipment. To identify the specific model of Digital QC for your needs, please contact our customer service/sales department at 1.800.645.9721.

How can you tell if an ESP product has been damaged or is defective?

If the circuit breaker trips or there is no power coming from the ESP product, then the ESP product has sacrificed itself as the result of an extremely rare and unusual electrical event or it is defective. Do not continually attempt to reset the breaker. Simply unplug the ESP product and call 1-800-645-9721 or go to www.realpowerprotection.com to get your "Free Warranty Replacement" product.

I have heard that surge protectors wear out after time?

This is commonly known as “degradation” in the industry. A typical consumer grade surge protector or surge strip uses MOVs (metal oxide varistors) as the surge component. These components have a finite life expectancy that is measured in energy absorption. The more it is used the less remaining energy handling life it has left.

If surge protectors wear out after time, what happens to the Digital QC?

ESP's products incorporate multi-stage patented designs that take advantage of the strengths of all of the available surge protection technologies; at the same time our designs eliminate any component weaknesses, like increased leakage and component degradation. To enhance the performance of ESP's surge components, ESP uses second, third and fourth order noise-filtering technologies that allow ESP to attain the NO Upset, threshold of the ITIC/CBEMA standard. After many years of hard work protecting your system, an ESP Digital QC will produce the same results as it did the day you first plugged it in.

What is a surge protector designed to do?

A consumer grade surge protector or surge strip is designed only to protect connected equipment against hardware damage, often by sacrificing itself.

What is the difference between a surge protector and a power filter?

Unlike the ESP Digital QC Power Filter, all surge protectors let through enough damaging energy to disrupt the operation of your equipment. Noise is passed completely unfiltered and often enough energy is let through to damage your sensitive equipment. If your information and your operational productivity are important to you, then a consumer surge strip is not appropriate for your application.

What is your clamping voltage?

ESP products as tested independently by UL for the UL 1449 Standard are rated 330 Volts. Clamping levels are a function of the duration, frequency and voltage of an incoming disturbance. ESP's Digital QC filters most incoming disturbance down to levels that meet or exceed the no upset level of the ITIC/CBEMA standard. In addition, if the frequency content is such that the disturbance also needs to be clamped down, in the line to neutral and line to ground modes, ESP starts clamping at about 20% above the line voltage.

What is your response time? (What is response time?)

Response time is typically that time it takes for component or product to react to an incoming disturbance. Through poor design or poor manufacturing techniques, it is possible to take the response time of a typical Metal Oxide Varistor (MOV) of 25 nano seconds and slow it down to make it less responsive. ESP has taken great care in the design and manufacturing process to ensure that the response times of any component used by ESP in its products have been maximized. For example, according to the suppliers of our components, the clamping response time in our digital QC model is less than 1 nanosecond. Because ESP's Digital QC uses a state of the art high frequency noise filtering circuit, this circuit is an active circuit, which means that the filtering is always on, always reacting instantly to power line disturbances.

Do you have a diagnostic circuits or fault indicators?

Yes, ESP inspects and detects wiring faults: Before we give you the GREEN Light, we check the ground connection and the continuity of the hot and neutral conductors. If conditions are right, we give you the GO signal. Green means “GO”.

Is your product UL approved?

All of our products are listed to the appropriate UL Standards. Just turn over the product and look for the cULus Logo on the manufacturing label.

What is the ITIC/CBEMA Standard?

ESP's circuitry is designed to reduce let thru energy to levels to meet or exceed the "No Upset" level that has been defined by ITIC/CBEMA (Computer and Business Equipment Manufacturers Association) as being compatible with sensitive electronics. See Fig 1, page 19 of IEEE C62.41, the IEEE C62 standard. Neither the typical surge suppressor nor the typical filter can fully comply with this curve. Nor will a typical top of the line product. The only products other than ESP products that will comply are some true on-line UPS products and top of the line Ferro resonant power conditioning products. For comparable power ratings, these solutions are typically >10 times the price of the most expensive ESP product.

Is your product transformer based?

No, a transformer is an electrical device that uses alternating magnetic fields to induce current flow from the primary winding to the secondary winding. To see if a product is "Transformer Based", simply check for continuity between the line and neutral blades of the input plug with an Ohmmeter. If you have continuity, the product contains a transformer.

ESP's major technological break through in power protection circuitry was to develop a hybrid power filter that exceed the performance of a transformer based power line conditioner at a fraction of the cost, size and weight. For example, a 120 volt, 15 amp power conditioner that had an actual transformer inside the case would weigh in excess of 65 pounds and cost many times more than our product does... about a \$1000.00 for a 120 volt 15 amp transformer based product that doesn't deliver the results that you will get from the Digital QC.

Is the Digital QC a battery backup unit or UPS?

No.

Why would you recommend using the Digital QC with a battery backup unit or UPS?

If the fact that the power can be shut off has a high cost to you or your organization, then a battery back up system or UPS is recommended in conjunction with the use of ESP's Digital QC. Count on the battery back up for power when there isn't any and count on the Digital QC for clean power. Battery back up systems utilize microprocessor technology to facilitate switching from the AC power grid to the internal battery in the UPS. This circuitry needs to be protected. Testing battery back up systems has demonstrated that they provide little surge protection and usually no noise filtering, therefore you need a Digital QC all the time and a UPS in addition on those mission critical applications. We suggest that you purchase the least expensive battery back up system that will handle your load requirements. That investment plus the cost of the Digital QC will still be significantly less than the cost of a true on-line UPS system, and capable of handling bigger loads.

How much does a power filter cost?

That varies depending upon the equipment protected and the specific power filter requirements you might have. Click on the "Contact Us" section of the web site and we'll guide you to the closest Regional manager who can answer specific questions about your business needs.

What joule rating do you have and what does that mean?

This is an area where many individuals and companies attempt to confuse you by distorting laboratory specifications rather than focus on product performance. According to the premier authority on surge protection, the Institute of Electrical & Electronics Engineers, "energy rating can be misleading . . . a lower energy rating does not necessarily mean a lower capability of survival in the transient environment." Rather than play games with "specsmanship" or trying to mislead you, we don't deal specifically with joule ratings. Instead we measure the real-world performance by measuring the actual energy let-through by the power filter to the protected product. ESP products have the lowest energy let-through values in the industry.

What exactly does the network connection do? Noise, surges, what?

The Network connection provides protection and Cat5e compatibility against voltage surges and spikes. Noise is generally not a problem since Ethernet uses a balanced line configuration, which inherently cancels noise; also Ethernet uses error correction circuitry. If noise filtering were provided in the network protection circuit, it would interfere with the data transmission.

Same question for fax/modem lines?

Essentially the same answer as above, just that the protection voltage levels are optimized for the phone lines. ESP also offers products with DSL Filtering, please call our customer service department for further details.