

MPE's Capabilities

MPE have a proud reputation as one of the world's leading Filter & Capacitor specialists.

With a proven heritage of design, development and manufacture of high performance EMC/RFI Filters & Capacitors, MPE are the first choice for companies who require the most cost effective emc solution, quality products and technical support.

MPE's unrivalled capability and experience of many defence, telecoms, industrial and commercial applications enables MPE to supply filters & capacitors to satisfy the most exacting customer requirements from Military Vehicles, IT Servers & Telecoms Base Stations to EMP, NEMP, LEMP, HEMP, & TEMPEST commercial & military installations.

Continuous capital investment programs in our 40,000 sq ft production facility, specialist test equipment & design software ensure we maintain our capability to manufacture all critical components in-house & service customers throughout the world.

MPE's comprehensive standard product range includes high performance feedthrough capacitors to high current power, telephone, data & control line filters with wide frequency spectrum characteristics in a choice of enclosure styles.

In addition, MPE's Engineering department can offer a rapid prototyping service by utilising in-house specialist test equipment, a dual chamber screened room, proprietary capacitor & filter software, or draw from an accumulated portfolio of over 20,000 custom product designs in an effort to provide the optimum solution.

All products are RoHS compliant where relevant & come with full technical support & application advice where needed.

MPE hold factory & product accreditations which include Fighting Vehicles designs, NATO stock numbers, Def-Stan, UL & BT approvals, & BS EN ISO9001.

Product Customisation

If a standard MPE product does not manage to satisfy customers requirements - MPE specialise in the design & manufacture of custom solutions that will solve the problem, both technically & commercially.

Main areas of success with customised products over many years include:-

Telecoms & Information Technology Sector Solutions

Custom filters & capacitors for base stations, servers, switches, power supplies etc, have been cost effectively tailored to suit the clients' required performance, packaging, mounting, & termination parameters. Ongoing product development to minimise part count and reduce component costs ensure that supply relationships are considered & maintained throughout product lifecycles.

Military & Defence Sector Solutions

As a supplier of EMI/EMP solutions for military & defence applications for more than 70 years, MPE have the experience, knowledge & products to protect all forms of equipment or installation, including vehicles, ships, submarines, aircraft, missiles, generators, power supplies, signal lines, radars, shelters & communications buildings.

MPE Limited

Hammond Road, Knowsley Industrial Park, Liverpool L33 7UL, UK

Email: sales@mpe.co.uk

Web: www.mpe.co.uk

T: +44 (0) 151 632 9100

F: +44 (0) 151 632 9112



CERTIFICATE No. FM 00699
BS EN ISO 9001 : 1994



MPE

In a Universe of Interference
A World of Solutions

SHORT FORM



Power Line Filters

Type: Comprehensive series inc; standard range, very high current & extended performance, single & 3 phase ranges, multiple-line, low leakage & 400Hz designs
Current Rating: 5A - 2400A AC single & 3 phase, 5A - 200A DC
Voltage Rating: 250V DC / 115 - 440V AC
Performance: Insertion loss of 100dB from 10kHz-10GHz at full load. (40GHz option)
Features: Low heat dissipation, small footprint, self healing plastic film capacitors, various cable entry options
Applications: Shielded rooms, tactical & mobile shelters, computer suites, EMC, EMP, TEMPEST protection of installations...



CleanPower Filters

Type: High performance, single & 3 phase ranges
Current Rating: 6A - 160A
Voltage Rating: 250V / 440V AC
Performance: Insertion loss 100dB from 100kHz - 1GHz
Features: Cost effective, compact size, enclosed terminals, stainless steel enclosure, bulkhead or chassis mount
Applications: Industrial power cabinets & equipments, shielded rooms, computer installations...



Telephone Line Filters

Type: High & extended performance designs in standard enclosures from 2 to 240 lines
Current Rating: 125mA / 300mA
Voltage Rating: 95 - 250V AC/DC
Performance: Insertion loss of 100dB from 14kHz - 10GHz (40GHz option)
Features: Low pass circuits, 300/600 ohm & complex impedance circuits, self-healing capacitors, matched pairs, transient protection options, BT approved
Applications: Shielded rooms, communication cabins, signal lines, EMP, TEMPEST protection systems...



Data Line Filters

Type: High performance ranges for digital circuits
Current Rating: 100mA
Voltage Rating: 100V AC/DC
Performance: Circuits for 2.4kB/s to 10MB/s - 100dB to 10GHz
Features: Standard & custom designs available with different data rates & impedances to suit data protocols. Various package styles & transient protection options.
Applications: Shielded rooms, data security, communication cabins, signal lines, TEMPEST, EMC, EMP protection systems, including ISDN, RS232, RS422 & RS423 protocols...



Control Line Filters

Type: Single-line feedthrough & multi-line AC/DC control line filter ranges
Current Rating: 1A - 10A AC/DC
Voltage Rating: 250V AC (600V DC), 28V DC - 100V DC
Performance: 100dB from 14kHz to 10GHz
Features: High performance-to-size ratio, up to 200 line designs available, various cable entries, transient suppression & EMP protection options
Applications: Shielded rooms, low current power lines, fire, intruder, control indicator applications & general installations...



Equipment Filters

Type: Single & 3 phase, high performance, general purpose & SMPS designs
Current Rating: 1A - 100A
Voltage Rating: 250V AC, 100V DC
Performance: 10kHz - 1GHz
Features: Self-healing feedthrough capacitors, wide frequency performance range, low noise impedance, bulkhead or chassis mount
Applications: Switch-mode power supplies, communications systems, industrial & military equipments...

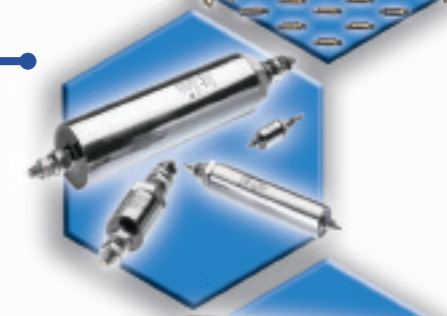
Feedthrough Suppression Capacitors

Type: AC/DC, high performance, high current, miniature & 400Hz capacitor ranges
Current Rating: 1A - 500A
Voltage Rating: 115V/250V AC, 30V DC - 1000V DC
Performance: 1.3nF - 40uF to > 40GHz
Features: Self-healing plastic film capacitors, high insertion loss in compact enclosures, bulkhead mounting, MOD Fighting Vehicle Approved
Applications: Telecoms, base stations, IT equipment, servers, medical, defence, military & general filter circuits requiring high frequency suppression...



Feedthrough Filters & Capacitors

Type: AC/DC, standard, high & extended performance, class Y2 & Y4 feedthrough filter & capacitor ranges
Current Rating: 10A - 300A
Voltage Rating: 100V DC - 130V DC, 130V AC - 250V AC
Performance: 2.2nF - 8uF to > 1GHz
Features: Nickel plated brass tubular body, self-healing plastic film capacitors, threaded terminals for bulkhead or chassis mountings. High capacitance, low cost aluminium case DC range for telecoms
Applications: Telecoms, base stations, IT equipment, servers, medical, process control, defence, power supplies & general filter circuits...



EMP EMI TEMPEST Protection Filters

Type: High performance, Electro-Magnetic Pulse protection, power, data, telephone and control line filters
Current Rating: 1A - 2400A
Voltage Rating: 250V AC, DC to 440
Performance: 100dB from 14kHz to > 20GHz
Features: Multi-stage, full frequency spectrum protection within shielded enclosures, high pulse energy capability, replaceable transient elements, enclosed terminals, corrosion resistant, tested with NATO standard EMP pulses
Applications: Lightning, EMP, Nuclear and high powered microwave EMP, TEMPEST shelters & systems, shielded rooms, defence, telecoms systems, civil and public service utilities, homeland security, secure commerce and IT installations...



HEMP Protection Filters (MIL-STD-188-125-1 & -2)

Type: High performance, High altitude Electro-Magnetic Pulse protection filters, single & 3 phase power filters
Current Rating: 6A - 400A; higher current ratings available
Voltage Rating: 250V AC
Performance: 20 dB at 10kHz to 80dB from 10MHz to > 1GHz
Features: 2 & 4 line designs, superior transient suppression performance, individual filtered lines with inductive input. Smallest, lightest, most cost-effective units available - specifically designed to meet MIL-STD
Applications: HEMP protection of power lines for military, tactical shelters, homeland defence, key commercial infrastructure, fixed installations, secure commerce, IT/telecoms installations...



Miniature Ceramic EMI Filters

Type: General purpose & high current feedthrough suppression capacitors and filters for signal, data & power circuits
Current Rating: 0.3A - 25A
Voltage Rating: 80 - 450V DC
Performance: Up to 17dB from 30kHz to 80dB at 1GHz (performance dependant on circuit type)
Features: Available as C, LL & Pi circuits. Threaded end, bulkhead mounting, hermetically sealed.
Applications: Line filtering for aerospace, avionics, military, high temperature applications ...



Military Vehicle Filters

Type: Standard 2 line, multi-line filters & high current feedthrough capacitor MOTS/COTS designs
Current Rating: 3A - 100A
Voltage Rating: 28V DC
Performance: 90dB from 150kHz to > 1GHz
Features: 2 line, & 1-8 multi-line designs in various current ratings, self-healing feedthrough capacitors, integral screened flying leads, compact enclosures, screw & bulkhead mounting, customisation available
Applications: To assist equipment on military vehicles to meet DEF STAN 59-41 & MIL-STD-461 EMC compliance, including single & multi-speed motors, air conditioning systems, blower motors, windscreen wipers motors, alternators, generators, actuators, engine management, equipment power...



For more detailed product information, catalogues, technical data or new developments, please refer to our website, contact our worldwide distributor network or simply call MPE direct...

Email: sales@mpe.co.uk

T: +44(0)151 632 9100

Web: www.mpe.co.uk

F: +44(0)151 632 9112