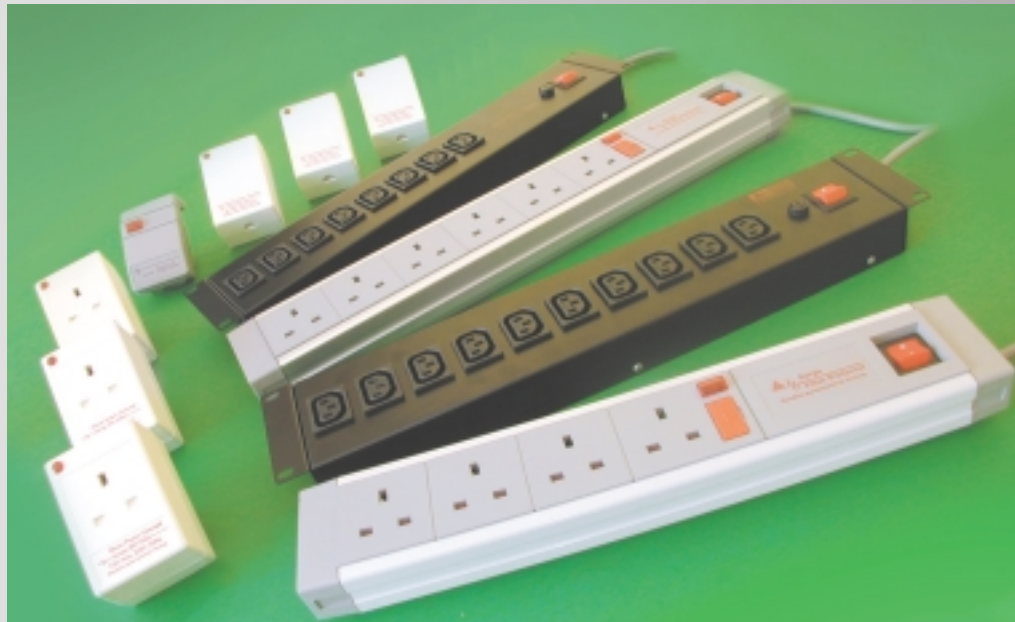


Surge Protection Products for the small office/home office and professional grade

With the increasing reliance on Computer and other micro-processor based equipment - the importance of protecting data and hardware cannot be stressed enough.



Why surge protection? Why Bowthorpe EMP?

There are many things that we can do in our offices to ensure that our equipment and data are safe from the dangers lurking outside our four walls. Many people may already be familiar with the protection afforded by a UPS (Uninterruptible Power Supply), Firewall etc but 'transient overvoltage protection' is often overlooked. Often, the hardware damage, coupled with the loss of data can prove catastrophic to some companies and therefore the importance of covering all options cannot be overlooked, or deemed non-cost effective.

As one of the leading specialist manufacturers of surge protection in Europe with over 50 years experience in this field, we are pleased to be able to offer a complete solution to this problem. Bowthorpe EMP is registered to ISO 9001 and supplies products which comply with BS6651: 1999, Annex C which identifies three different location categories in a typical building. They are: supply side of

the main incoming power distribution board (Category C - Primary level): mains distribution system (Category B - Intermediate Level): and the load sides of socket outlets (Category A - Secondary Level Protection). Products specifically designed for categories A and B are dealt with in this publication.

Bowthorpe EMP supply all surge protected socket strips and plug-in adaptors with 'Thermal Overload Protection', as standard. This essential safety feature is fitted so that should a continuous fault occur on the incoming supply line, rather than continue to clamp any resultant increase in voltage (causing the internal surge protection components to overheat and give risk to fire, or electric shock) the thermal device operates and disconnects the surge protection circuit.

Please feel free to contact us by phone, fax, e-mail, or simply visit our web site at: <http://energy.tycoelectronics.com>

Instant protection from surges caused by:

- ◆ Lightning
- ◆ Fluorescent lights
- ◆ Vacuum cleaners
- ◆ Central heating pumps
- ◆ Lifts
- ◆ Fan heaters
- ◆ Air conditioners
- ◆ Photocopiers
- ◆ Maintenance power tools etc
- ◆ Fridge freezers
- ◆ Welders
- ◆ Washing machines
- ◆ Electric kettles
- ◆ Switching of inductive and capacitive loads

Small Office/Home Office Use



Designed for Small Office / Home Office applications where a cost-effective means of protecting often expensive and sensitive microprocessor based equipment is required. All units are designed to BS 6651:1999 Annex C location category B.

4 & 6 WAY SURGE PROTECTOR - 423 & 623

Comply with BS 1363 and BS 6396. Ideal for where up to six outlets require surge protection. These units are used in the same way as an ordinary socket strip. An easily accessible earth connection is provided to assist the user to comply with the requirements of BS 6396 and is also fitted with a 7 Amp fuse as per the BS specification covering office furniture. However both models are fully rated at 13 Amps for other applications.

- ◆ Rated 13 Amps with 7 Amp fuse fitted.
- ◆ Cool grey and dark grey coloured aesthetically pleasing housing.
- ◆ Thermal overload protection.
- ◆ 2 metres of cable supplied with UK type plug.
- ◆ Flame retardant moulding.
- ◆ Intersocket protection.
- ◆ Suitable for wall mounting via optional brackets.
- ◆ External earth connector.
- ◆ Neon indication to denote:
a) Protection unit is intact.
b) Supply fuse is not ruptured.
- ◆ Solid busbar construction for high reliability
- ◆ Available with 4 or 6 socket outlets.

4 & 6 WAY SURGE & RFI PROTECTOR - 443 & 643

Comply with BS 1363 and BS 6396. Ideal for where up to six outlets require surge and RFI protection. An easily accessible earth connection is provided to assist the user to comply with the requirements of BS 6396 and is also fitted with a 7 Amp fuse as per the BS specification covering office furniture. However both models are fully rated at 13 Amps for other applications.

- ◆ Rated 13 Amps with 7 Amp fuse fitted.
- ◆ Cool grey and dark grey coloured aesthetically pleasing housing.
- ◆ Thermal overload protection.
- ◆ Typical RFI attenuation of -20dB.
- ◆ 2 metres of cable supplied with UK type plug.
- ◆ Flame retardant moulding.
- ◆ Intersocket surge protection.
- ◆ Suitable for wall mounting via optional brackets.
- ◆ External earth connector.
- ◆ RFI protection in both common and transverse modes.
- ◆ Neon indication to denote:
a) Protection unit is intact.
b) Supply fuse is not ruptured.
- ◆ Solid busbar construction for high reliability.
- ◆ Available with 4 or 6 socket outlets.

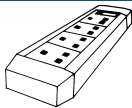
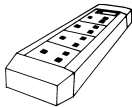
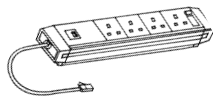
Applications:

- ◆ PC's
- ◆ Colour Monitors
- ◆ Scanners
- ◆ Printers and Plotters
- ◆ Fax Machines
- ◆ Modems
- ◆ Telephone and Answering Machines

4 WAY MODEM/TELECOM PROTECTOR - 423GBD

The 423 GBD has a BT type surge protected socket which allows the user to protect telecommunications equipment, single modems, fax/telex machines and telemetry equipment against high current surges and induced lightning by the incorporation of high energy components with extremely fast reaction time. Pins 2 and 5 are protected and the electrical earth supply is commoned with the telecom circuit to provide protection from high voltage interference.

- ◆ Rated 13 Amps with 7 Amp fuse fitted.
- ◆ Cool grey and dark grey housing.
- ◆ Thermal overload protection.
- ◆ Flame retardant moulding.
- ◆ Intersocket protection.
- ◆ 2 metres of cable supplied with UK type plug.
- ◆ Suitable for wall mounting via optional brackets.
- ◆ Neon indication to denote:
 - a) Protection unit is intact.
 - b) Supply fuse is not ruptured.
- ◆ Fitted with 1.5 metre BT type patch lead.

SMALL OFFICE/HOME OFFICE	4 & 6 WAY SURGE PROTECTOR		4 & 6 WAY SURGE & RFI PROTECTOR		4 WAY MODEM/ TELECOM PROTECTOR
SPECIFICATION					
Voltage Rating	230 Volts		230 Volts		230 Volts
Maximum Current Rating	13 Amp		13 Amp		13 Amp
Maximum Surge Current Handling (8/20us) [per element]	13,500 Amps [4,500]		13,500 Amps [4,500]		13,500 Amps [4,500]
Average Attenuation dB Symmetric 1-30 MHz	N/A		-20		N/A
Full Premium Three Mode Protection (L-N, L-E, and N-E)	✓		✓		✓
Voltage Protection Level	Up=900V@3kA 8/20us		Up=900V@3kA 8/20us		Up=900V@3kA 8/20us
Protection Active Indicator Light	✓		✓		✓
Power Consumption	Negligible		Negligible		Negligible
Response Time	<10ns		<10ns		<10ns
BS6651:1999 Annex C Location Category	A and B		A and B		A and B
MODEM/TELECOM PROTECTION					
Maximum Surge Current 8/20us (per wire)	N/A		N/A		5000 Amps
Clamping Voltage	N/A		N/A		300 Volts
Protected Pins	N/A		N/A		2 and 5
Line Impedance (Nominal)	N/A		N/A		10 Ohms
DC Breakover Voltage	N/A		N/A		220 Volts
Maximum Line Capacitance	N/A		N/A		130 pF
Number of Sockets	4	6	4	6	4
Dimensions (in mm) L	45	45	45	45	45
W	286	395	286	395	365
D	75	75	75	75	75
Weight (in grams)	674	831	689	839	832
Order Code	423GBA/BOW-CP 623GBA/BOW-CP		443GBA/BOW-HP 643GBA/BOW-PB		423GBD/BOW-CP

Professional Grade Products



Ideal for business applications, these products are used similarly to conventional plugs and sockets. All dissipate incoming and outgoing surges to or from electronic equipment. Power consumption is negligible and all reset automatically. The internal surge suppressors are tested against 'worst case' conditions as defined in International Standards IEEE C62.41-1991 Cat B3 and comply with the recommendations of BS6651: 1999 Annex C.

Applications:

- ◆ Multimedia Computers
- ◆ PC's
- ◆ Process Controllers
- ◆ Electronic Cash Registers
- ◆ Printers and Plotters
- ◆ Network Controllers
- ◆ Fax Machines
- ◆ Automatic Tellers
- ◆ Factory Machinery
- ◆ Laboratory and Test Equipment
- ◆ Modems
- ◆ Satellite Control Systems
- ◆ Communication Systems
- ◆ Recording Studio Systems
- ◆ Stage Lighting Control Panels and Sound Systems
- ◆ Medical Electronic Equipment
- ◆ Electronic Counting & Weighing Scales
- ◆ Telephone Exchanges

TRANQUIL PROTECTOR - TRANQ/TE

The Tranquil Protector offers an elegant solution to dirty mains. Ideal for modern office environments it is wired and used as an ordinary plug.

- ◆ Rated 10 Amps with 3 Amp fuse fitted.
- ◆ Grey flame retardant moulding
- ◆ Thermal overload protection.
- ◆ Approved to EN60950.
- ◆ Neon indication to denote:
 - Protection unit is intact.
 - Supply fuse is not ruptured.

FILTER PLUG AND ADAPTOR - FP and FA

The Filter Plug replaces a normal plug and provides protection against the dangers of surge and Radio Frequency Interference (RFI). It allows you to permanently wire your equipment to a clean power supply. The Filter Adaptor offers the same protection levels as the Filter Plug but allows you to connect your existing plug into a clean power unit.

- ◆ Beige flame retardant housing.
- ◆ Thermal overload protection.
- ◆ Filter Plug is ideal for business applications where the Filter Adaptor may be mislaid!
- ◆ 3 Amp version is most commonly used for microprocessor based products.
- ◆ 7 Amp version is most commonly used for telephone exchanges.
- ◆ 13 Amp version is most commonly used for general business applications.
- ◆ Neon indication to denote:
 - Protection unit is intact.
 - Supply fuse is not ruptured.
- ◆ Complies with BS 5733, IEC61643 and the IT Safety Standard EN60950.

4 & 6 WAY SURGE AND RFI PROTECTOR - 431 & 631

Comply with BS1363 and BS6396. These models are aimed at the business or industrial market where a unit is required to overcome both Surge and Radio Frequency problems. The unit is supplied in an attractive two-tone housing suitable for free standing or wall mounting. An easily accessible earth connection is provided to assist the user in complying with the requirements of BS6396.

- ◆ Rated 13 Amps.
- ◆ Outlets protected from RFI and surges to ensure a clean power supply.
- ◆ 2 metres of cable supplied with a UK type plug.
- ◆ Power ON/OFF switch.
- ◆ Flame retardant moulding.
- ◆ Cool grey and dark grey coloured housing.
- ◆ Thermal overload protection.
- ◆ Typical RFI attenuation of -50dB.
- ◆ RFI protection in both common and transverse modes.
- ◆ External earth connector.
- ◆ Intersocket surge protection.

- ◆ Allows user to comply with BS 6396 by fitting a 7 Amp fuse.
- ◆ Neon indicator to denote:
 - Protection unit is intact.
 - Supply fuse is not ruptured.
- ◆ Available with 4 or 6 socket outlets.
- ◆ Solid busbar construction for high reliability.

10 WAY IEC 19" SURGE PROTECTOR - 1028 IEC

Provides surge protection for ten IEC socket outlets.

- ◆ For main characteristics see features list above.

8 WAY IEC 19" SURGE & RFI PROTECTOR - 838 IEC

Provides surge and RFI protection for eight IEC socket outlets.


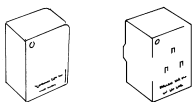
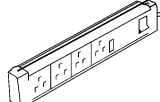


- ◆ RFI protection in both common and transverse modes.
- ◆ Typical RFI attenuation of -50dB.
- ◆ For main characteristics see features list above.

19" RACK MOUNTED IEC STRIPS

Designed for use in 19" rack applications, these power distribution socket strips provide a convenient means of distributing mains power to equipment installed in rack mounted systems. Units are supplied in a robust steel 2U high enclosure and are supplied with a 2 metre lead and BS1363 plug. These units are fused and are provided with a main power ON/OFF switch with neon indicator. Surge protection is fitted as standard and exceeds the requirements of BS6651: 1999 Annex C, location category B.

Features

- ◆ Rated 10 Amps.
- ◆ Supplied with 2 metre lead and UK type plug.
- ◆ Robust steel powder coated 2U high enclosure.
- ◆ Illuminated power 'ON/OFF' switch and fused.
- ◆ Thermal overload protection.
- ◆ Intersocket surge protection.

PROFESSIONAL GRADE	Tranquil Protector	Filter Plug And Adaptor	4 & 6 Way Surge & RFI Protector	10 Way IEC 19" Surge Protector	8 Way IEC 19" Surge & RFI Protector
Specification					
Voltage Rating	230 Volts	230 Volts	230 Volts	230 Volts	230 Volts
Maximum Current Rating	10 Amp	3, 7 and 13 Amp	13 Amp	10 Amp	10 Amp
Maximum Surge Current Handling (8/20us) [per element]	13,500 Amps [4,500]	19,500 Amps [6,500]	19,500 Amps [6,500]	13,500 Amps [4,500]	19,500 Amps [6,500]
Average Attenuation dB Symmetric 1-30 MHz	N/A	-55 (3A) -50 (7A) -45 (13A)	-50	N/A	-50
Full Premium Three Mode Protection (L-N, L-E, and N-E)	✓	✓	✓	✓	✓
Voltage Protection Level	Up=900V@3kA 8/20us	Up=900V@3kA 8/20us	Up=900V@3kA 8/20us	Up=900V@3kA 8/20us	Up=900V@3kA 8/20us
Protection Active Indicator Light	✓	✓	✓	x	x
Power Consumption	Negligible	Negligible	Negligible	Negligible	Negligible
Response Time	<10ns	<10ns	<10ns	<10ns	<10ns
BS6651:1999 Annex C Location Category	A and B	A and B	A and B	A and B	A and B
Number Of Sockets	N/A	Plug - N/A Adaptor 1	4 6	10	8
Dimensions (in mm) L F D	90 60 40	93 93 63 63 55 63	406 515 45 45 75 75	483 45 88	483 45 88
Weight (in grams)	105	206/212 222/229 230/240	870 1030	1645	1670
Order Code	TRANQ/TE FP7-BOW/FA7-BOW	FP3-BOW/FA3-BOW 631GBA/BOW-HP FP13-BOW/FA13-BOW	431GBA/BOW-CP	1028IEC/GB/BOW	838IEC/GB/BOW



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



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Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.