



THOR

thortechnologies.com.au



**ENGINEERING
INNOVATIVE
POWER FILTRATION
AND PROTECTION
PRODUCTS**



**PRODUCT
CATALOGUE
2023**

WELCOME

Since our inception in 2001 we have grown significantly and this is shown by the innovation in our latest range of cutting edge products.

Research, development and engineering is undertaken in Australia and New Zealand.

The past has seen a partnership in technology develop between Thor Technologies and a leading New Zealand University – Waikatolink.

Thor Technologies is 100% Australian and proud of it. Thor Technologies designs and produces products for our own 'back yard' so you can be assured that when we make a promise we stand by it. Being local we intend to only ever guarantee to offer products that do what we say they do.

At the end of the day it is what's inside the product that counts. Some of you would be surprised at the small number of components that are found in competing brands. Competitors must think the bigger, heavier and glossier the product the more it will sell. If you are in the market for power protection based on this concept then you may need more help than we can give, so be careful.

In 2001, The Surge Shield range brought power protection which had not changed much since the early 80's, into the new millennium. Digital technology has evolved and is far more sensitive to power disturbances. This makes clean power an essential requirement where home theatre, computers or processor controlled systems are being used.

2006 saw the launch of a new generation of product – The SMART SERIES range.

February 2011 the release of the 20Amp rack mount version of the very successful Smart Power Station .

2016 saw a new era in release of a patented technology co-developed with our university technology partner. The R & D team has worked hard and has merged its experience with an ear for what the market was asking for.

2023 introduced a refresh for a new modern look as well as launching new rack and board range models including our Patented non sacrificial protection circuit, the Prodigy range.

The Prodigy and Smart Series circuits have been updated to include the improved filtering too. Improvements over 70% in performance when compared to Australian Industry Standards of similar brands on the market. Our products will provide the best solution for your equipment whether it is for your home or office.

Remember we are local so if you have a problem or there is not a product in our range available to you off the shelf come and talk to us as we may be able to build it for you – it is that simple!

POWER CONDITIONING	2
PS10	4
PS20	6
SURGE PROTECTION AND FILTERING	8
PRODIGY 8	10
SMARTBOARD 8	12
SMARTFILTER 8	14
SMARTPROTECT 7	16
SMARTPROTECT 6	18
SMARTPROTECT 4	20
SMARTFILTER DUO+	22
RACK PROTECTION	24
RF11P	26
RF11iQP	28
RJ45-S	30
RJ45-16	32
HARDWIRED	34
CM90	36
DRM95-20A	38
DRM95-30A	40
RIPPLE FILTERS	42
PRODUCT COMPARISON	44
FAQS	46



POWER CONDITIONING

When you need pure pristine
conditioned power & voltage
regulation with 24/7 performance.



“

The PS10 takes this to the next level, now with a dead quiet background, allowing the music to come through with no restriction at all.

John, Kumbia QLD

SMARTPOWER STATION

PURE PRISTINE POWER 24/7



MODEL: PS10



POWER PROTECTION



NOISE FILTRATION



WARRANTY



REACTION TIME



FEATURES

- 8 PROTECTED OUTLETS
- 3 ISOLATED BANKS
- PURE SINE WAVE OUTPUT
- UNDER & OVER VOLTAGE STABILIZATION
- AERIAL PROTECTION
- PAY TV PROTECTION
- DATA/VOICE PROTECTION
NBN COMPATIBLE
- 2 LARGE PLUG ADAPTORS
- 1.8M CABLE LENGTH
- FIRE RETARDANT
- 6 YEAR REPLACEMENT WARRANTY

PROTECTS

- ALL SCREEN TECHNOLOGY
- COMPUTER & AV SERVERS
- TOP END HI FI & AUDIO
- ANY DEVICE THAT PERFORMS BETTER WITH PURE POWER 24/7

- AUSTRALIAN DESIGNED AND ENGINEERED
- ALL R&D CARRIED OUT IN AUSTRALIA AND NEW ZEALAND
- Made in China

MODEL: **PS10**

SMARTPOWER STATION PS10

THE ULTIMATE PROTECTION

Pure pristine power 24/7. For ultimate in power conditioning with under/over voltage stabilization that enhances performance without changing the THD so Audiophiles love it! It can deliver 240V output or (user selectable) option 220V to deliver the power your system was designed for.



- 1 Input Voltage Display
- 2 Output Current Display
- 3 Output Voltage Display
- 4 Working Normal Display
- 5 Delay Start Switch
- 6 Power Switch
- 7 Display On/Off Switch
- 8 Input - IEC Male
- 9 Reset Circuit Breaker
- 10 A12 Board input
- 11 User selectable output setting (240V or 220V)
- 12 External Earth Connection



The Thor SmartBrain not only protects from surges, it also filters and cleans electrical frequency noise to give you unbeatable sound and video quality. Enjoy a truer AV experience with better picture quality and purer sound. Can also improve computer gaming speeds and fix internet dropouts.

TECHNICAL SMARTS

Product Dimensions: 436mm (W) x 195mm (H) x 380mm (D) | Supply Voltage: 240/Vac 50Hz | Maximum Current Rating: 10amps/2400 W (Va) | Wave Form: Pure Sine Wave | Operating Voltage: 180v - 260v | Incoming Voltage out of designed range (i.e. 180v - 260v): if input was 270v then output would be approx 250v to 255v | Incoming Voltage out of designed range (i.e. 180v - 260v): if input voltage was 140v then output would be approx 230v - 235v | Safety Approval No: RCM 5287 | Model No: PS10 | Double Filtration and Protection Management: A12 Smart Board included

INSIDE THE SMART BRAIN

SmartBrain has a premium filter technology called Dynamic Active Tracking. This unique filter has the best chance of "cleaning" electrical noise because it shields around 40% more frequencies when compared to other filters. It is an Active filter and can "clean" unwanted frequencies on both the upward curve and the downward curve of a sine wave (power). Most other filters only work at the crest of the wave and therefore miss a huge section of unwanted frequencies that can generate noise on sensitive electronic devices.

SMARTPOWER STATION

PURE PRISTINE POWER 24/7



MODEL: PS20



POWER PROTECTION









NOISE FILTRATION



REACTION TIME



FEATURES

-  PURE SINE WAVE OUTPUT
-  UNDER & OVER VOLTAGE STABILIZATION
-  CIRCUIT BREAKER ON/OFF SWITCH
-  TERMINATES VIA USER SELECTION
-  INSTALL BY ELECTRICIAN
-  6 YEAR REPLACEMENT WARRANTY

PROTECTS

-  ANYTHING RACK MOUNTED
-  ALL SCREEN TECHNOLOGY
-  COMPUTER & AV SERVERS
-  TOP END HI FI & AUDIO
-  ANY DEVICE THAT PERFORMS BETTER WITH PURE POWER 24/7

 AUSTRALIAN DESIGNED AND ENGINEERED

 ALL R&D CARRIED OUT IN AUSTRALIA AND NEW ZEALAND

Made in China

MODEL: PS20

SMARTPOWER STATION PS20

THE ULTIMATE PROTECTION

Pure pristine power 24/7. For ultimate in rack mount power conditioning with under/over voltage stabilization that enhances performance without changing the THD so Audiophiles love it! It can deliver 240V output or (user selectable) option 220V to deliver the power your system was designed for.



- Input Voltage Display
- Output Current Display
- Output Voltage Display
- Working Normal Display
- Delay Start Switch
- Power Switch
- Display On/Off Switch
- User selectable output setting (240V or 220V)
- External Earth Connection



The Thor SmartBrain not only protects from surges, it also filters and cleans electrical frequency noise to give you unbeatable sound and video quality. Enjoy a truer AV experience with better picture quality and purer sound. Can also improve computer gaming speeds and fix internet dropouts.

TECHNICAL SMARTS

Product Dimensions: 436mm x 195mm x 380mm | Supply voltage 240V AC 50Hz | Maximum current rating 20amps/4800 W (VA) | Wave Form Pure Sine Wave | Operating Voltage 180V - 260V | Incoming Voltage out of designed range (i.e. 180v - 260v): if input was 270v then output would be approx 250v to 255v | Incoming Voltage out of designed range (i.e. 180v - 260v): if input voltage was 140v then output would be approx 230v - 235v | Includes DRM95 20A Isolated Mains Filter and Spike/Surge Protection module | Model PS20

INSIDE THE SMART BRAIN

SmartBrain has a premium filter technology called Dynamic Active Tracking (inc DRM95 20A). This unique filter has the best chance of "cleaning" electrical noise because it shields around 40% more frequencies when compared to other filters. It is an Active filter and can "clean" unwanted frequencies on both the upward curve and the downward curve of a sine wave (power). Most other filters only work at the crest of the wave and therefore miss a huge section of these unwanted frequencies that can generate noise on sensitive electronic devices.



Unbelievable product has made movies noticeably blacker blacks and the sound clearer for music

Nick, Palmwoods QLD





SURGE PROTECTION AND FILTERING

These products are designed to protect your valuable electronics from voltage spikes and surges.

PRODIGY 8

ULTIMATE REGENERATIVE POWER
PROTECTION AND FILTRATION



**130 X MORE
PROTECTION**
THAN AUSTRALIAN
INDUSTRY STANDARDS



**UNLIMITED
JOULES**



**70% MORE
FILTRATION**
THAN AUSTRALIAN
INDUSTRY STANDARDS



**PATENTED
NON SACRIFICIAL
TECHNOLOGY**



**UNLIMITED
CONNECTED EQUIPMENT
WARRANTY**

FEATURES



8 PROTECTED
OUTLETS



2 ISOLATED BANKS



AERIAL
PROTECTION



PAY TV
PROTECTION



DATA/VOICE
PROTECTION
NBN COMPATIBLE



4 LARGE PLUG
ADAPTORS



ALARM BUZZER
DETECTS IF SURGE
CIRCUIT IS DAMAGED



1 NANO SECOND
REACTION TIME



1.8M BRAIDED
CABLE



FIRE RETARDANT



6 YEAR
REPLACEMENT
WARRANTY

PROTECTS



4K/8K TV



HIFI AND
HOME THEATRE



ACTIVE/PASSIVE
SPEAKERS



INTERNET
REDUCES
DROPOUT



COMPUTERS



PRINTERS AND
SCANNERS



GAMING
IMPROVES SPEED



STREAMING
IMPROVES
PERFORMANCE



AUSTRALIAN DESIGNED
AND ENGINEERED



ALL R&D CARRIED OUT IN
AUSTRALIA AND NEW ZEALAND

Made in China

MODEL: P8

PRODIGY 8

ULTIMATE REGENERATIVE POWER PROTECTION AND FILTRATION

Now with new patented non-sacrificial technology, the PRODIGY 8 is the most comprehensive and advanced solution to protect your electronic equipment.

- 1 Unfiltered outlet for surge protection only
 - 2 Bank 1 (3 outlets): Surge protection and filtering
 - 3 Bank 2 (4 outlets): Surge protection and filtering
 - 4 Space for 4 large plug adaptors
 - 5 Network ready RJ 45 data protection (1 in and 1 out)
 - 6 AV/TV connection (2 in and 2 out)
 - 7 Resettable safety 10 amp circuit breaker
 - 8 Fireproof MOV
- Fireproof MOV ensures the main protection components will not catch fire while protecting from dangerous surges. The choice of Fireproof components and the added flame retardant housing safeguards ensures your home and family will always be safe.
- 9 Braided 1.8m cable



PATENTED
NON SACRIFICIAL
TECHNOLOGY

Unlike current traditional surge protection technology Thor's Patented circuit is not sacrificial. It uses a regeneration process to absorb spikes and surges then resets itself ready to protect over and over again. To use an analogy, think of a shock absorber. A shock absorber is designed for absorbing the energy of sudden impulses or shocks in machinery or structures and once that energy has been absorbed, it resets back to its default state. Our Patented Non-Sacrificial Technology does the same except working against dangerous spikes and surges in power.

INSIDE THE PRODIGY

Supply voltage 240V AC 50/Hz • Maximum current rating 10amps/2400 W (VA) • Clamping/Let Through Voltage 300VAC • Reaction time less than 1 nanosecond • Maximum energy dissipation unlimited Joules • Protection modes (all 8 outlets protects on all 3 conductors): Active/Neutral, Active/Earth, Neutral/Earth • EMI/RFI noise reduction filter type • Total number of protected AC outlets: 8 • Pay TV 'F' type connection: 2 in and 2 out • RJ 45 data protection: 1 in and 1 out • Earth potential rise protection • Earth leakage range less than 1 milli amp • Operating conditions: Indoor/AC mains • Operating temperatures: -10C/+60C • Cable length: 1.8m • Model No: P8.



SMARTBOARD

ULTIMATE POWER PROTECTION
AND FILTRATION



x8

MODEL: A12BF

POWER PROTECTION



NOISE FILTRATION

70% MORE
FILTRATION
THAN AUSTRALIAN
INDUSTRY
STANDARDS

WARRANTY

UP TO
\$300K
FOR CONNECTED
EQUIPMENT

REACTION TIME

1NANO
0.000000001
SECOND

FEATURES

- 8 PROTECTED OUTLETS
- 3 ISOLATED BANKS
- AERIAL PROTECTION
- PAY TV PROTECTION
- DATA/VOICE PROTECTION
NBN COMPATIBLE
- LARGE PLUG ADAPTOR
- 1.8M CABLE LENGTH
- FIRE RETARDANT
- 6 YEAR REPLACEMENT WARRANTY

PROTECTS

- OLED/LCD TV
- HIFI AND HOME THEATRE
- ACTIVE/PASSIVE SPEAKERS
- INTERNET
REDUCES NBN/ADSL DROPOUT
- COMPUTERS
- PRINTERS AND SCANNERS
- GAMING
IMPROVES SPEED

AUSTRALIAN DESIGNED
AND ENGINEERED

ALL R&D CARRIED OUT IN
AUSTRALIA AND NEW ZEALAND

Made in China

MODEL: A12BF

SMARTBOARD 8

THE ULTIMATE PROTECTION

SmartBoard Smart Series with unique Dynamic Active Tracking™ is the most comprehensive and advanced solution to protect your electronic equipment.

- 1 AV/TV connection (in and out)
- 2 Bank 1 (1 outlet): Surge protection only
- 3 Bank 2 (3 outlets): Surge protection and filtering
- 4 Bank 3 (4 outlets): Surge protection and filtering
- 5 Large plug adaptors
- 6 RJ 45 data protection (1 in and 1 out)
- 7 Resettable safety 10 amp circuit breaker



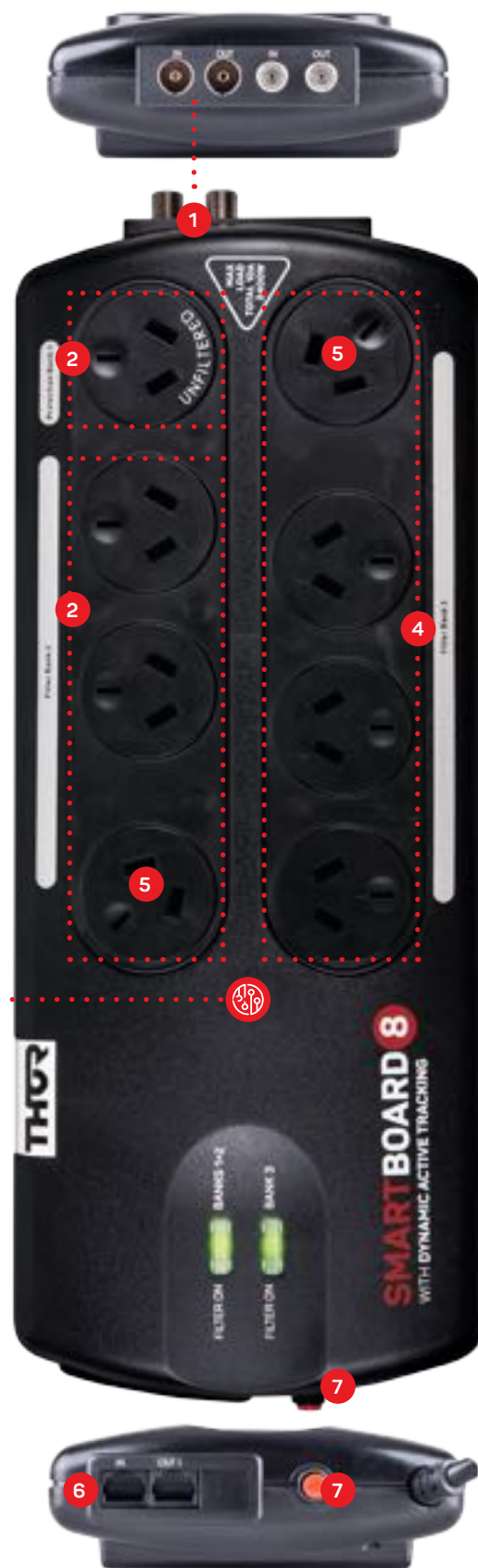
SmartBrain has a premium filter technology called Dynamic Active Tracking. This unique filter has the best chance of "cleaning" electrical noise because it shields around 40% more frequencies when compared to other filters. It is an Active filter and can "clean" unwanted frequencies on both the upward curve and the downward curve of a sine wave (power). Most other filters only work at the crest of the wave and therefore miss a huge section of these unwanted frequencies that can generate noise on sensitive electronic devices.

TECHNICAL SMARTS

Supply voltage 240V AC 50/Hz | Maximum current rating 10amps/2400 W (VA) | Clamping/Let through voltage 300VAC | Reaction time less than 1 nanosecond | Maximum transient spike impulse current 208,000 amps (equivalent to 52,000 amps using UL1449 standard) | Maximum energy dissipation | 7222 Joules (equivalent to 2440 Joules using UL1449 standard) | Protection modes (all 8 outlets protects on all 3 conductors): Active/Neutral, Active/Earth, Neutral/Earth | EMI/RFI noise reduction filter type Dynamic Active Tracking™ incorporating 38 separate protection components in | 3 cascading circuits | Number of multi-stage filter banks: 2 | Number of isolated banks: 3 | Number of dedicated outlets: 4+3+1 | Total number of protected AC outlets: 8 | RJ 45 data protection: 1 in and 1 out | AV/TV Connection: In and out | Cable TV 'F' type connection: In and out | Earth potential rise protection | Earth leakage range less than 1 milli amp | Operating conditions: Indoor/AC mains | Operating temperatures: -10C/+60C | Cable length: 1.8m | Model No: A12BF

INSIDE THE SMART BRAIN

There are 5 separate earth lines which is a hum/loop reducing feature. This feature stops component cross talk and ensures isolation between the 3 x AC Banks (1 x 1 outlet; 1 x 3 outlet; 1 x 4 outlet) as well as the antenna/F type and Data connections. True circuit isolation ensures best performance for all connected equipment.



SMARTFILTER

SMART TECHNOLOGY POWER PROTECTION
AND FILTRATION



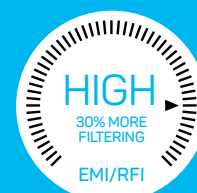
x8

MODEL: B8+

POWER PROTECTION



NOISE FILTRATION



WARRANTY



REACTION TIME



FEATURES

- 8 PROTECTED OUTLETS
- 2 ISOLATED BANKS
- AERIAL PROTECTION
- PAY TV PROTECTION
- DATA/VOICE PROTECTION
NBN COMPATIBLE
- LARGE PLUG ADAPTOR
- 1.8M CABLE LENGTH
- FIRE RETARDANT
- 6 YEAR REPLACEMENT WARRANTY

PROTECTS

- OLED/LCD TV
- HIFI AND HOME THEATRE
- ACTIVE/PASSIVE SPEAKERS
- INTERNET
REDUCES NBN/ADSL DROPOUT
- COMPUTERS
- PRINTERS AND SCANNERS
- GAMING
IMPROVES SPEED

AUSTRALIAN DESIGNED
AND ENGINEERED

ALL R&D CARRIED OUT IN
AUSTRALIA AND NEW ZEALAND

Made in China

MODEL: B8+

SMARTFILTER 8

CLEVER PROTECTION FOR SMART TECHNOLOGY

SmartFilter 8 has two unique isolated banks offering fail-safe protection for your valuable electronic equipment, plus advanced noise filtering for improved sound and video quality.

- 1 AV/TV connection (in and out)
- 2 Bank 1 (4 outlets): Surge protection and filtering
- 3 Bank 2 (4 outlets): Surge protection and filtering
- 4 Large plug adaptors
- 5 RJ 45 data protection (1 in and 1 out)
- 6 Resettable safety 10 amp circuit breaker

SMART BRAIN

The Thor SmartBrain not only protects from surges, it also filters and cleans electrical frequency noise. Cascade Filter "cleans" around 20% more frequencies than other filtered boards to give you unbeatable sound and video quality. Enjoy a truer AV experience with better picture quality and purer sound. Can also improve computer gaming speeds and fix internet dropouts.

TECHNICAL SMARTS

Supply voltage 240V_{AC} 50/Hz | Maximum current rating 10amps/2400 W (VA) | Clamping voltage 300V_{AC} | Reaction time less than 1 nanosecond | 5868 Joules (equivalent to 2122 Joules using UL1449 standard) | Protection modes (all 8 outlets protects on all 3 conductors): Active/Neutral, Active/Earth, Neutral/Earth | EMI/RFI noise reduction filter type. Cascade dual bank isolation with 2 cascading circuits | Number of multi-stage filter banks: 2 | Number of isolated banks: 2 | Number of dedicated outlets: 4+4 | Total number of protected AC outlets: 8 | RJ 45 data protection: 1 in and 1 out | AV/TV Connection: In and out | Cable TV 'F' type connection: In and out | Earth potential rise protection | Earth leakage range less than 1 milli amp | Operating conditions: Indoor/AC mains | Operating temperatures: -10C/+60C | Cable length: 1.8m | Model No: B8+

INSIDE THE SMART BRAIN

There are 4 separate earth lines which is a hum/loop reducing feature. This feature stops component cross talk and ensures isolation between the 2 x AC Banks (2 x 4 outlets) as well as the antenna/F type and Data connections. True circuit isolation ensures best performance for all connected equipment.



SMARTFILTER

SMART TECHNOLOGY POWER PROTECTION
AND FILTRATION



MODEL: D1/45B

POWER PROTECTION



NOISE FILTRATION








WARRANTY



REACTION TIME



FEATURES

-  **7 PROTECTED OUTLETS**
-  **DATA/VOICE PROTECTION**
NBN COMPATIBLE
-  **1.2M CABLE LENGTH**
-  **FIRE RETARDANT**
-  **6 YEAR REPLACEMENT WARRANTY**

PROTECTS

-  **OLED/LCD TV**
-  **HIFI AND HOME THEATRE**
-  **ACTIVE/PASSIVE SPEAKERS**
-  **INTERNET**
REDUCES NBN/ADSL DROPOUT
-  **COMPUTERS**
-  **PRINTERS AND SCANNERS**

 **AUSTRALIAN DESIGNED AND ENGINEERED**

 **ALL R&D CARRIED OUT IN AUSTRALIA AND NEW ZEALAND**

Made in China

MODEL: **D1/45B**

SMARTFILTER 7

CLEVER PROTECTION FOR SMART TECHNOLOGY

SmartFilter 7 is the entry level way to protect your most valuable electrical equipment.

- 1** RJ 45 data protection (1 in and 1 out)
- 2** Single Bank (7 outlets): Surge protection and filtering
- 3** Resettable safety 10 amp circuit breaker



**SMART
BRAIN**

The Thor SmartBrain not only protects from surges, it also filters and cleans electrical frequency noise. The filter works both ways. Stopping noise from robbing equipment performance as well as connected devices' noise contaminating power.

TECHNICAL SMARTS

Supply voltage 240V AC 50/Hz | Maximum current rating 10amps/ 2400 W (VA) | Clamping voltage 275VAC | Reaction time less than 1 nanosecond | Maximum transient spike impulse current 156,000 amps (equivalent to 39,000 amps using UL1449 standard) | Maximum energy dissipation 4588 Joules (equivalent to 1550 Joules using UL1449 standard) | Protection modes (all 7 outlets protects on all 3 conductors): Active/Neutral, Active/Earth, Neutral/Earth | EMI/RFI noise reduction filter type | Total number of protected AC outlets: 7 | RJ 45 data protection: 1 in and 1 out | Earth potential rise protection | Earth leakage range less than 1 milli amp | Operating conditions: Indoor/AC mains | Operating temperatures: -10C/+60C | Cable length: 1.2m | Model No: D1/45B

INSIDE THE SMART BRAIN

All serious power protection diverts excess energy to earth first. If there is good earth connection then the protector will last longer. D1/45B has an earth detection LED for this reason.

SmartBrain entry level filter is a passive technology. Managing to cover a more comprehensive range of shielding to like competitors by "cleaning" a wider range of unwanted frequency noise.



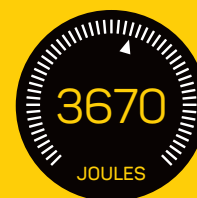
SMARTPROTECT

SMART TECHNOLOGY POWER PROTECTION
AND FILTRATION



MODEL: E1/45U

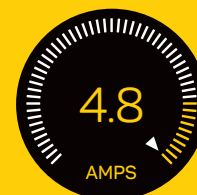
POWER PROTECTION



NOISE FILTRATION



TURBO CHARGED USB



WARRANTY



REACTION TIME



FEATURES

-  **4 PROTECTED OUTLETS**
-  **2 USB PORTS**
TURBO CHARGED
4.8A
-  **AERIAL PROTECTION**
-  **PAY TV PROTECTION**
-  **DATA/VOICE PROTECTION**
NBN COMPATIBLE
-  **LARGE PLUG ADAPTOR**
-  **1.2M CABLE LENGTH**
-  **FIRE RETARDANT**
-  **6 YEAR REPLACEMENT WARRANTY**

PROTECTS

-  **OLED/LCD TV**
-  **SMARTPHONES**
-  **TABLETS**
-  **HIFI AND HOME THEATRE**
-  **ACTIVE/PASSIVE SPEAKERS**
-  **COMPUTERS**
-  **PRINTERS AND SCANNERS**

 **AUSTRALIAN DESIGNED AND ENGINEERED**

 **ALL R&D CARRIED OUT IN AUSTRALIA AND NEW ZEALAND**

Made in China

MODEL: **E1/45U**

SMARTPROTECT 6

4 X OUTLETS + 2 X USB

CLEVER PROTECTION FOR SMART TECHNOLOGY

SmartProtect 6 does more than protect your valuable electronic equipment. The two USB power ports automatically adjust to the voltage of your smart technology to charge your devices quicker.

- 1 Pay TV connection (in and out)
- 2 USB ports with device detecting charging technology at a massive 4.8A
- 3 AV/TV connection (in and out)
- 4 RJ 45 data protection (1 in and 1 out)
- 5 Single Bank (4 outlets): Surge protection and filtering
- 6 Large plug adaptor
- 7 Resettable safety 10 amp circuit breaker



The Thor SmartBrain not only protects from surges, it also filters and cleans electrical frequency noise. The filter works both ways. Stopping noise from robbing equipment performance as well as connected devices' noise contaminating power.

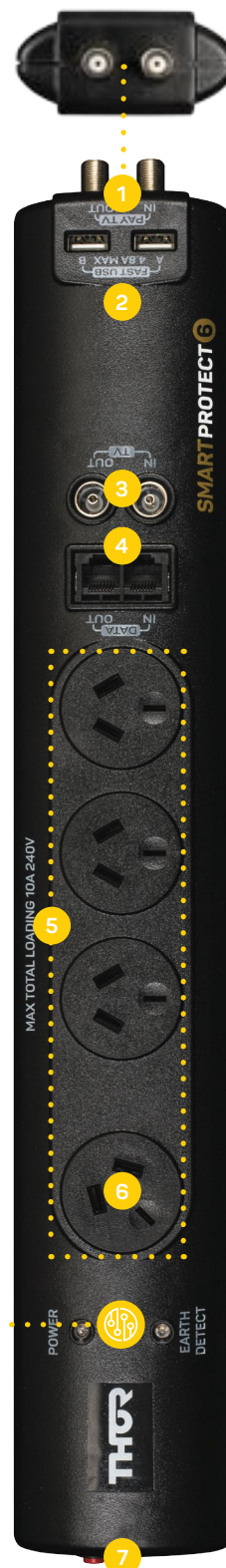
TECHNICAL SMARTS

Supply voltage 240V_{AC} 50/Hz | Maximum current rating 10amps/2400 W (VA) | Clamping voltage 275V_{AC} | Reaction time less than 1 nanosecond | Maximum transient spike impulse current 125,000 amps (equivalent to 31,200 amps using UL1449 standard) | Maximum energy dissipation 3670 Joules (equivalent to 1240 Joules using UL1449 standard) | Protection modes (all 4 outlets protects on all 3 conductors): Active/Neutral, Active/Earth, Neutral/Earth | EMI/RFI noise reduction filter type | Total number of protected AC outlets: 4 | Total number of protected USB ports: 2 | Pay TV 'F' type connection: 1 in and 1 out | AV/TV antenna coax connection: 1 in and 1 out | RJ 45 data protection: 1 in and 2 out | Earth potential rise protection | Earth leakage range less than 1 milli amp | Operating conditions: Indoor/AC mains | Operating temperatures: -10C/+60C | Cable length: 1.2m | Model No: E1/45U

INSIDE THE SMART BRAIN

All serious power protection diverts excess energy to earth first. If there is good earth connection then the protector will last longer. E1/45U has an earth detection LED for this reason.

SmartBrain entry level filter is a passive technology. Managing to cover a more comprehensive range of shielding to like competitors by "cleaning" a wider range of unwanted frequency noise.



SMARTPROTECT

SMART TECHNOLOGY POWER PROTECTION
AND FILTRATION



x4

MODEL: E1/45S

POWER PROTECTION



NOISE FILTRATION



WARRANTY



REACTION TIME



FEATURES

- 4 PROTECTED OUTLETS
- AERIAL PROTECTION
- PAY TV PROTECTION
- DATA/VOICE PROTECTION
NBN COMPATIBLE
- LARGE PLUG ADAPTOR
- 1.2M CABLE LENGTH
- FIRE RETARDANT
- 6 YEAR REPLACEMENT WARRANTY

PROTECTS

- OLED/LCD TV
- HIFI AND HOME THEATRE
- ACTIVE/PASSIVE SPEAKERS
- COMPUTERS
- PRINTERS AND SCANNERS

AUSTRALIAN DESIGNED
AND ENGINEERED

ALL R&D CARRIED OUT IN
AUSTRALIA AND NEW ZEALAND

Made in China

MODEL: E1/45S

SMARTPROTECT 4

CLEVER PROTECTION FOR SMART TECHNOLOGY

SmartProtect 4 does more than protect your valuable electronic equipment. The space saving design now means you can have surge protection and filtration anywhere.

- 1 Pay TV connection (in and out)
- 2 RJ 45 data protection (1 in and 1 out)
- 3 Single Bank (4 outlets): Surge protection and filtering
- 4 Large plug adaptor
- 5 Resettable safety 10 amp circuit breaker



The Thor SmartBrain not only protects from surges, it also filters and cleans electrical frequency noise to give you unbeatable sound and video quality. Enjoy a truer AV experience with better picture quality and purer sound.

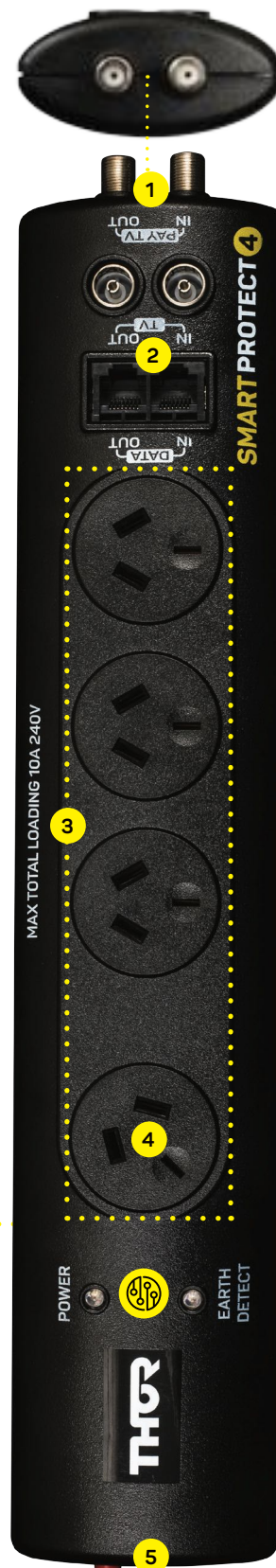
TECHNICAL SMARTS

Supply voltage 240V AC 50/Hz | Maximum current rating | 10amps/2400 W (VA) | Reaction time less than 1 nanosecond | Maximum transient spike impulse current 86,000 amps (equivalent to 21,500 amps using UL1449 standard) | Maximum energy dissipation | 3637 Joules (equivalent to 846 Joules using UL1449 standard) | Protection modes (all 4 outlets protects on all 3 conductors): Active/Neutral, Active/Earth, Neutral/Earth | EMI/RFI noise reduction filter type | Total number of protected AC outlets: 4 | Pay TV 'F' type connection: 1 in and 1 out | AV/TV antenna coax connection: 1 in and 1 out | RJ 45 data protection: 1 in and 1 out | Earth potential rise protection | Earth leakage range less than | 1 milli amp | Operating conditions: Indoor/AC mains | Operating temperatures: -10C/+60C | Cable length: 1.2m | Model No: E1/45S

INSIDE THE SMART BRAIN

All serious power protection diverts excess energy to earth first. If there is good earth connection then the protector will last longer. E1/45s has an earth detection LED for this reason.

SmartBrain entry level filter is a passive technology. Managing to cover a more comprehensive range of shielding to like competitors by "cleaning" a wider range of unwanted frequency noise.



SMARTFILTER

SMART TECHNOLOGY POWER PROTECTION
AND FILTRATION



MODEL: C2+

PROTECTION

**FIREPROOF
MOV**

PROTECT YOUR HOME
AND FAMILY

POWER PROTECTION



NOISE FILTRATION

**50% MORE
FILTRATION**

THAN AUSTRALIAN
INDUSTRY
STANDARDS

WARRANTY

UP TO
\$75K

FOR CONNECTED
EQUIPMENT

FEATURES

- 2 PROTECTED OUTLETS
- LARGE PLUG ADAPTOR
- SPACE SAVING FLAT HEAD PLUG
- 1.0M CABLE LENGTH
- FIRE RETARDANT
- 6 YEAR REPLACEMENT WARRANTY

PROTECTS

- OLED/LCD TV
- HIFI AND HOME THEATRE
- WHITE GOODS
- COMPUTERS
- PRINTERS AND SCANNERS

AUSTRALIAN DESIGNED
AND ENGINEERED

ALL R&D CARRIED OUT IN
AUSTRALIA AND NEW ZEALAND

Made in China

MODEL: C2+

SMARTFILTER DUO+

CLEVER PROTECTION FOR SMART TECHNOLOGY

Smart Filter Duo+ is the affordable way to protect your most valuable electrical equipment. The space saving design now means you can have surge protection and filtration anywhere.

- 1 Large plug adaptors
- 2 Earth detection safeguard
- 3 Active power LED
- 4 1 metre cord with space saving flat head plug
- 5 Fireproof MOV

Fireproof MOV ensures the main protection components will not catch fire while protecting from dangerous surges. The choice of Fireproof components and the added flame retardant housing safeguards ensures your home and family will always be safe.



**SMART
BRAIN**

The Thor SmartBrain not only protects from surges, it also filters and cleans electrical frequency noise. The filter works both ways. Stopping noise from robbing equipment performance as well as connected devices' noise contaminating power.

TECHNICAL SMARTS

Supply voltage 240V AC 50/Hz | Maximum current rating | 10amps/2400 W (VA) | Clamping voltage 300V_{ac} | Reaction time less than 1 nanosecond | Maximum transient spike impulse current 42,000 amps (equivalent to 14,000 amps using UL1449 standard) | Maximum energy dissipation | 2295 Joules (equivalent to 510 Joules using UL1449 standard) | Protection modes: Active/Neutral, Active/Earth, Neutral/Earth | EMI/RFI noise reduction filter | Total number of protected AC outlets: 2 | Earth potential rise protection | Earth leakage range less than 1 milli amp | Earth detection circuit: Yes | Operating conditions: Indoor/AC mains | Operating temperatures: -10C/+60C | Cable length: 1.0m | Model No: C2+

INSIDE THE SMART BRAIN

All serious power protection diverts excess energy to earth first. If there is good earth connection then the protector will last longer. C2+ has an earth detection LED for this reason.



RACK PROTECTION

These products protect mission critical equipment in racks including remote control functions.



“

Australian designed remote
controlled rack protection.....
why are you guys a secret?
It just works...

Gavin IT tech support, Sydney NSW

SMARTTRACK GUARD

DUAL CIRCUIT PROTECTION
AND FILTRATION



RF11P

MODEL: RF11P



130 X MORE
PROTECTION*



UNLIMITED
JOULES



70% MORE
FILTRATION*



PATENTED
NON SACRIFICIAL
TECHNOLOGY








1 NANO SECOND
REACTION TIME

*THAN AUSTRALIAN
INDUSTRY STANDARDS

FEATURES

-  RACK MOUNTABLE - 1RU
-  ADJUSTABLE SIDE BRACKETS
-  PATENTED NON SACRIFICIAL TECHNOLOGY
-  4 X IEC CONNECTIONS (REAR)
-  7 X 3 PIN OUTLETS (FRONT)
-  2.0M CABLE LENGTH
-  6 YEAR REPLACEMENT WARRANTY

PROTECTS

-  AV RACK EQUIPMENT
-  SERVERS
-  SWITCHES/ ROUTERS/ MODEMS
-  IP TV
-  PAY TV DECODERS

MODEL: RF11P

SMART RACK GUARD RF11P

INDUSTRY LEADING PROTECTION

When racks are involved space is generally a premium. The Smart Rack Guard 11 with adjustable sliding brackets is compact and neat without the bulk. Industry leading spike/surge protection as well as SmartBrain filtering technology.

Smart Rack Guard 11 features two fault warning lights on the front of the unit (labelled '1' for the front bank and '2' for the connectors on the rear) that, when lit green, signify that all devices are connected are fully protected. Should surge damage the RF11P, the corresponding fault lights will switch to red, alerting that the unit needs to be replaced.



- 1 Circuit 1 = 7 x Australian pin outlets
- 2 On/Off switch
- 3 Green lit LED "ok" visual indicators
- 4 Adjustable rack ears for depth control
- 5 Input power lead
- 6 Reset - overload
- 7 IEC circuit



PATENTED NON SACRIFICIAL TECHNOLOGY

Unlike current traditional surge protection technology Thor's Patented circuit is not sacrificial. It uses a regeneration process to absorb spikes and surges then resets itself ready to protect over and over again. To use an analogy, think of a shock absorber. A shock absorber is designed for absorbing the energy of sudden impulses or shocks in machinery or structures and once that energy has been absorbed, it resets back to its default state. Our Patented Non-Sacrificial Technology does the same except working against dangerous spikes and surges in power.

TECHNICAL SMARTS

Product Dimensions: 484mm(W) x 47.5mm(H) x 182mm(D) | Supply voltage 240/V AC 50Hz | Maximum current rating 10amps/2400 W (VA) | Clamping/Let through voltage 300VAC | Reaction speed less than 1 nanosecond | Maximum transient spike impulse current (Amps) 156,000 amps. Equivalent to 39,000 Amps using UL1449 standard | Maximum Energy Dissipation (Joules) 3420 Joules. Equivalent to 1140 Joules using UL1449 standard | Protection Modes Active/ Neutral, Active/Earth, Neutral/Earth (all 11 outlets protects on all 3 conductors) | Noise Reduction Filter EMI/RFI (SmartBrain Passive) | Total Number Protected and Filtered outlets 11 | Earth Potential Rise Protection | Earth Leakage Range less than 1 milli amp | Operating conditions Indoor/AC Mains | Operating Temperatures -10C/+60C | Cable length 2.0m | Dual Isolated Circuit | LED Warning if surge protection compromised | Model: RF11P

AUSTRALIAN DESIGNED
AND ENGINEERED

ALL R&D CARRIED OUT IN
AUSTRALIA AND NEW ZEALAND

RF11P-FS-Made in China

RF11iQP PRODIGY RACK GUARD REMOTE

8X REMOTE CONTROLLED PORTS
WITH PATENTED SURGE AND
SPIKE PROTECTION



**130 X MORE
PROTECTION**
THAN AUSTRALIAN
INDUSTRY STANDARDS



**UNLIMITED
JOULES**



**70% MORE
FILTRATION**
THAN AUSTRALIAN
INDUSTRY STANDARDS



PATENTED
NON SACRIFICIAL
TECHNOLOGY










**1 NANO SECOND
REACTION TIME**

FEATURES

-  **SETTABLE AUTOMATIC REBOOT**
-  **REMOTE MONITOR VIA NETWORK CONNECTION**
-  **RACK MOUNTABLE - 1RU**
-  **ADJUSTABLE SIDE BRACKETS**
-  **1GB NETWORK AUTO NEG**
-  **4 X IEC CONNECTIONS (REAR)**
-  **7 X 3 PIN OUTLETS (FRONT)**
-  **SNMP**
-  **MDNS**
-  **OTA FIRMWARE UPDATES**
-  **2.0M CABLE LENGTH**
-  **6 YEAR REPLACEMENT WARRANTY**

PROTECTS

-  **AV RACK EQUIPMENT**
-  **SERVERS**
-  **SWITCHES/ ROUTERS/ MODEMS**
-  **IPTV**
-  **COMPUTERS**

-  **AUSTRALIAN DESIGNED AND ENGINEERED**
 -  **ALL R&D CARRIED OUT IN AUSTRALIA AND NEW ZEALAND**
- Made in China

MODEL: RF11iQP

RF11iQP PRODIGY

INDUSTRY LEADING PROTECTION JUST GOT BETTER

The RF11iQP Prodigy has been designed with industry leading technology and integration of secure IP based monitoring functions with the ability to communicate via a web browser or control system. This remote access will allow users, particularly service technicians, immediate advice of any power interruption by sending an automated email alert. Control systems can customise RF11iQP functions and features by adding supplied API to become part of the integrated solution.



- 1** Automatic reboot settable on all outlets
- 2** 7 x Individually controlled Australian pin outlets
- 3** On/Off switch
- 4** Green lit LED "ok" visual indicators
- 5** Adjustable rack ears for depth control
- 6** Input power lead
- 7** Reset- Current overload
- 8** 4 IEC outlets
- 9** Factory default software reset switch
- 10** RJ45 network connection



PATENTED NON SACRIFICIAL TECHNOLOGY

Unlike current traditional surge protection technology Thor's Patented circuit is not sacrificial. It uses a regeneration process to absorb spikes and surges then resets itself ready to protect over and over again. To use an analogy, think of a shock absorber. A shock absorber is designed for absorbing the energy of sudden impulses or shocks in machinery or structures and once that energy has been absorbed, it resets back to its default state. Our Patented Non-Sacrificial Technology does the same except working against dangerous spikes and surges in power.

TECHNICAL SMARTS

Supply Voltage 230-240V AC 50Hz | Maximum Current Rating 10amps/2400 W (Va) | Clamping/Let through voltage 300V AC | Reaction Time less than 1 Nano Sec | Protection Modes (all 11 outlets protects on all 3 conductors) Active/Neutral, Active/Earth, Neutral/Earth | EMI/RFI Noise Reduction Filter | Total Number of Protected AC Outlets 11 | Earth Potential Rise Protection | Earth leakage Range less than 1 milli amp | Operating conditions Indoor/AC Mains | Operating Temperatures -10C/+60C | Model: RF11iQP

INSIDE THE RF11iQP PRODIGY

The RF11iQP has an 11 outlet configuration, which are remotely controllable across 8 zones. Each circuit has spike and surge protection as well as filtered technology to ensure safe and clean power is supplied to any connected devices. Given the nature of rack applications often being in mission critical installations, the design of the RF11iQP provides an immediate alert that it has had a power interruption. This allows service technicians to check status of outlets while not affecting the site operations.

SMARTSERIES

HIGH SPEED NETWORK
SURGE PROTECTION



RJ45-S

MODEL: RJ45-S

TRANSFER SPEED







REACTION SPEED










WARRANTY



FEATURES

-  RJ45 INPUT & OUTPUT
-  DIN RAIL MOUNTABLE
-  1000MB/S TRANSFER SPEED
-  12 MONTHS WARRANTY

PROTECTS

-  SERVERS
-  SWITCHES/ ROUTERS/ MODEMS
-  IP TV
-  PAY TV DECODERS
-  SECURITY CAMERAS
-  TELEPHONE
-  COMPUTER
-  ANY DEVICE ON A NETWORK

 AUSTRALIAN DESIGNED AND ENGINEERED

 ALL R&D CARRIED OUT IN AUSTRALIA AND NEW ZEALAND

Made in China

MODEL: RJ45-S

SMART SERIES RJ45-S

HIGH SPEED NETWORK PROTECTION

Introducing the Smart Series RJ45-S high speed network protection. Line induced spikes and voltage surges that could damage the host Computer, PLC or controller are easily suppressed by the RJ45-S. This unit is DIN rail mountable and fits between the Hub output and the terminals. Using two standard RJ Connectors for easy connecting and disconnecting. Damaging energy is diverted to system earth by means of fast acting components, the earth connection is connected via a plug allowing for quick removal or replacement of the device.

What causes spikes and surges in network cabling?

- 1 Power cables crossing network cables.
- 2 Equipment induced transients and surges.
- 3 Earth Potential Rise – this is where lightning strikes nearby and energises the surrounding earth. This energised area can cause surges to travel through, up, into and around walls and frames of structures. Network cabling is often housed in wall cavities and this surge then injects itself into the network cabling travelling through the cable and damaging connected equipment.

Installation

- 1 Run the grounding line as short as possible.
- 2 Loops or parallel runs of protected and unprotected lines must be avoided.



**SMART
BRAIN**

The RJ45-S is designed to protect devices connected through network cabling on a Direct Current (DC) supply. The device does not filter. It offers spike and surge protection to ensure data transfer speed is maintained. The product is relying on a solid earth connection to maximise the efficiency of the protection circuit capability. The earth connection is critical to ensure that when a dangerous high voltage spike or surge is detected the RJ45-S is able to divert this threatening voltage down to earth in the first instance. If the surge is too great to divert all the excess energy back to earth then the RJ45-S protection circuit will absorb the residual surge. The RJ45-S is designed to sacrifice itself if it is unable to absorb the surge and in doing so protect the connected equipment. By sacrificing itself it can prevent the connected equipment from damage and save on downtime associated costs. Replacement of the RJ45 protection module is simple and very quick.

TECHNICAL SMARTS

Product Dimensions: 94.5mm(W) x 25mm(L) x 25mm(D) | Nominal voltage Un(V) DC 48V | Nominal discharge current (in) (8/20µs) | Max. discharge current (in) (8/20µs) 10kA | Voltage protection level (UP) @1kV/us: UP : ≤ 45V (Line-Line), ≤ 600V (Line-PE) | Max transfer speed 1000MB/s | Response time <1000 picoseconds (ps) | Connection input RJ45 | Connection output RJ45 | 6.8V Clamping on Data Pins (1,2,3 & 6) & 53V Clamping on POE Pins (4,5,7 & 8) | Model No. RJ45-S.



SMARTSERIES

HIGH SPEED MULTIPLE NETWORK
SURGE PROTECTION



MODEL: RJ45-16

TRANSFER SPEED



REACTION TIME



WARRANTY



FEATURES



RJ45 INPUT
& OUTPUT



16 X INPUTS



RACK
MOUNTABLE -
1RU



1000MB/S
TRANSFER
SPEED



12 MONTHS
WARRANTY

PROTECTS



SERVERS



SWITCHES/
ROUTERS/
MODEMS



IP TV



PAY TV
DECODERS



SECURITY
CAMERAS



TELEPHONE



COMPUTER



ANY DEVICE
ON A NETWORK

MODEL: **RJ45-16**

SMART SERIES

RJ45-16

HIGH SPEED MULTIPLE NETWORK PROTECTION

Introducing the Smart Series RJ45-16 high speed network protection. Line induced spikes and voltage surges that could damage the host Computer, PLC or controller are easily suppressed by the RJ45-16. This rack unit is flange mountable and fits between the Hub output and the terminals. Using two standard RJ Connectors for easy connecting and disconnecting. Damaging energy is diverted to system earth by means of fast acting components, the earth connection is connected via a plug allowing for quick removal or replacement of the device.



What causes spikes and surges in network cabling?

- 1 Power cables crossing network cables
- 2 Equipment induced transients and surges
- 3 Earth Potential Rise – this is where lightning strikes nearby and energises the surrounding earth. This energised area can cause surges to travel through, up, into and around walls and frames of structures. Network cabling is often housed in wall cavities and this surge then injects itself into the network cabling travelling through the cable and damaging connected equipment.

Installation

- 1 Run the grounding line as short as possible.
- 2 Loops or parallel runs of protected and unprotected lines must be avoided.



**SMART
BRAIN**

The RJ45-16 is designed to protect devices connected through network cabling on a Direct Current (DC) supply. The device does not filter (this product is not connected to AC power). It offers spike and surge protection to ensure data transfer speed is maintained. The product is relying on a solid earth connection to maximise the efficiency of the protection circuit capability. The earth connection is critical to ensure that when a dangerous high voltage spike or surge is detected the RJ45-16 is able to divert this threatening voltage down to earth in the first instance. If the surge is too great to divert all the excess energy back to earth then the RJ45-16 protection circuit will absorb the residual surge. The RJ45-16 is designed to sacrifice itself if it is unable to absorb the surge and in doing so protect the connected equipment. By sacrificing itself it can prevent the connected equipment from damage and save on downtime associated costs. Replacement of the RJ45-16 protection Rack unit is simple and very quick.

TECHNICAL SMARTS

Product Dimensions: 490mm(W) x 125mm(L) x 45mm(D) | Nominal voltage Un(V) DC 48V | Nominal discharge current (in) (8/20μs) Max. discharge current (in) (8/20μs) 10kA | Voltage protection level (UP) @1kV/us: UP : ≤ 45V (Line-Line), ≤ 600V (Line-PE) | Max transfer speed 1000MB/s | Frequency 100MHz | Response time <1000 picoseconds (ps) | Connection input RJ45 | Connection output RJ45 | 6.8V Clamping on Data Pins (1,2,3 & 6) & 53V Clamping on POE Pins (4,5,7 & 8) | Model No. RJ45-16.



AUSTRALIAN DESIGNED
AND ENGINEERED



ALL R&D CARRIED OUT IN
AUSTRALIA AND NEW ZEALAND

Made in China



HARDWIRED

These products continuously monitor the sine wave to protect and clean incoming voltage.

A modern living room interior. In the foreground, there are two contemporary armchairs with light-colored upholstery and dark wooden legs. A round wooden coffee table with a starburst pattern on top sits in the center. Behind it, a larger wooden coffee table is also visible. The background features a large window with a black frame, a wall-mounted television, and a wooden shelf with various decorative items. A potted plant sits on the shelf. The floor is made of dark wood planks.

“

CBus system would not run. DRM95 & CM90 which rectified the problem. We are very happy with the result of an excellent filter combined with a competent technician.

Allan, Townsville Qld

SMARTCAVITY MOUNT

ACTIVE FILTER AND
SURGE PROTECTION MODULE



MODEL: CM90

POWER PROTECTION



NOISE FILTRATION



REACTION TIME




FEATURES

-  DYNAMIC ACTIVE TRACKING FILTER
-  SPIKE/SURGE PROTECTION
-  AVAILABLE 16A/ ELECTRICIAN TO INSTALL
-  6 YEAR REPLACEMENT WARRANTY

PROTECTS

-  ALL SCREENS
-  PROJECTORS
-  HI FI / AUDIOPHILES
-  SPEAKERS
-  RECORDING EQUIPMENT
-  COMPUTERS
-  CIRCUIT BOARDS

 AUSTRALIAN DESIGNED AND ENGINEERED

 ALL R&D CARRIED OUT IN AUSTRALIA AND NEW ZEALAND

Made in China

MODEL: CM90

SMARTCAVITY MOUNT CM90

THE ULTIMATE PROTECTION

SmartBoard Smart Series with unique Dynamic Active Tracking™ is the most comprehensive and advanced solution to protect your electronic equipment.

Originally designed to fit in wall cavity behind a power point. Its applications have grown to boating, caravanning, roof and behind large screens. These applications due to the slimline fire retardant housing that makes it a breeze to fit in space challenged areas.



Cleans, protects and can fix these sorts of problems

- 1 Massive surge protection
- 2 Lighting interference
- 3 Speaker hissing noise
- 4 Thumping noise from sub woofer
- 5 Reduces pixilation
- 6 Blurred picture
- 7 Picture scrambling
- 8 Hum noise



The Thor SmartBrain not only protects from surges, it also filters and cleans electrical frequency noise to give you unbeatable sound and video quality. Enjoy a truer AV experience with better picture quality and purer sound. Can also improve computer gaming speeds and fix internet dropouts.

TECHNICAL SMARTS

Product Dimensions: 140mm x 65mm x 30mm | Supply voltage 240V AC 50Hz | Maximum current rating 16amps/3840 W (VA) | Reaction Speed less than 1 nanosecond | Clamping Voltage 275V | EMI/RFI Noise Reduction Filter Types - Dynamic Active Tracking (SmartBrain Active Filter) | Maximum transient spike impulse current (Amps) 45,500 amps | Maximum Energy Dissipation 1330 Joules | Protected AC Incorporating 32 separate protection components | Earth Leakage Range - less than 1 millis amp | Model No. CM90 16A.

INSIDE THE SMART BRAIN

SmartBrain has a premium filter technology called Dynamic Active Tracking. This unique filter has the best chance of "cleaning" electrical noise because it shields around 70% more frequencies when compared to other filters. It is an Active filter and can "clean" unwanted frequencies on both the upward curve and the downward curve of a sine wave (power). Most other filters only work at the crest of the wave and therefore miss a huge section of these unwanted frequencies that can generate noise on sensitive electronic devices.

SMARTSERIES

HIGH CAPACITY AC MAINS
FILTERED PROTECTION



MODEL: DRM95-20A

POWER PROTECTION



NOISE FILTRATION

**70% MORE
FILTRATION**
THAN AUSTRALIAN
INDUSTRY
STANDARDS

REACTION TIME

1 NANO
0.00000001
SECOND

FEATURES

-  20A & 30A MODELS
-  DYNAMIC ACTIVE TRACKING FILTER
-  SPIKE/SURGE PROTECTION
-  NEEDS ELECTRICIAN TO INSTALL
-  6 YEAR REPLACEMENT WARRANTY

PROTECTS

-  WHOLE CIRCUIT FILTERED PROTECTION
-  LED LIGHTING SYSTEMS
-  CBUS & DYNALITE SYSTEMS
-  AV & SOUND CIRCUITS
-  AIR-CONDITIONERS
-  PCB OR OTHER TYPE SENSITIVE ELECTRONICS

MODEL: **DRM95-20A**

SMART SERIES

DRM95

THE ULTIMATE PROTECTION

SmartBoard Smart Series with unique Dynamic Active Tracking™ is the most comprehensive and advanced solution to protect your electronic equipment.

Improving flickering from LED or reducing re-programming from PLC and specialised lighting systems like CBUS/Dynalite to stopping spikes/surges or electrical noise contaminating whole circuits. DRM95 is relied on in these and many more similar type applications.

Cleans, protects and can fix these sorts of problems

- 1 Massive surge protection
- 2 Lighting interference
- 3 Speaker hissing noise
- 4 Thumping noise from sub woofer
- 5 Reduces pixilation
- 6 Blurred picture
- 7 Picture scrambling
- 8 Hum noise



**SMART
BRAIN**

The Thor SmartBrain not only protects from surges, it also filters and cleans electrical frequency noise to give you unbeatable sound and video quality. Enjoy a truer AV experience with better picture quality and purer sound. Can also improve computer gaming speeds and fix internet dropouts.

TECHNICAL SMARTS

Product Dimensions: 70mm(W) x 90mm(H) x 60mm(D) | Supply voltage 240/V AC 50Hz | Maximum current rating 20amps/4800 W (VA) | Clamping Voltage 275VAC | Maximum Transient Spike Impulse Current (AMPS) 49,000 amps | Maximum Energy Dissipation (Joules) 1330 Joules | EMI/RFI Noise Reduction Filter Type - Dynamic Active Tracking (SmartBrain Active) | Protected AC - Incorporating 32 separate protection components | Earth Leakage Range - Less than 1 milli amp | Operating Temperature -10C/+60C | Protection Modes on all 3 conductors Active/Neutral/Earth | Model No. DRM95 20A.

INSIDE THE SMART BRAIN

SmartBrain has a premium filter technology called Dynamic Active Tracking. This unique filter has the best chance of "cleaning" electrical noise because it shields around 70% more frequencies when compared to other filters. It is an Active filter and can "clean" unwanted frequencies on both the upward curve and the downward curve of a sine wave (power). Most other filters only work at the crest of the wave and therefore miss a huge section of these unwanted frequencies that can generate noise on sensitive electronic devices.



AUSTRALIAN DESIGNED
AND ENGINEERED



ALL R&D CARRIED OUT IN
AUSTRALIA AND NEW ZEALAND

Made in China

SMARTSERIES

HIGH CAPACITY AC MAINS FILTERED PROTECTION



MODEL: DRM95-30A

POWER PROTECTION



NOISE FILTRATION

**70% MORE
FILTRATION**
THAN AUSTRALIAN
INDUSTRY
STANDARDS


REACTION TIME

1 NANO
0.000000001
SECOND

FEATURES

-  20A & 30A MODELS
-  DYNAMIC ACTIVE TRACKING FILTER
-  SPIKE/SURGE PROTECTION
-  NEEDS ELECTRICIAN TO INSTALL
-  6 YEAR REPLACEMENT WARRANTY

PROTECTS

-  WHOLE CIRCUIT FILTERED PROTECTION
-  LED LIGHTING SYSTEMS
-  CBUS & DYNALITE SYSTEMS
-  AV & SOUND CIRCUITS
-  AIR-CONDITIONERS
-  PCB OR OTHER TYPE SENSITIVE ELECTRONICS

MODEL: **DRM95-30A**

SMART SERIES

DRM95

THE ULTIMATE PROTECTION

SmartBoard Smart Series with unique Dynamic Active Tracking™ is the most comprehensive and advanced solution to protect your electronic equipment.

Improving flickering from LED or reducing re-programming from PLC and specialised lighting systems like CBUS/Dynalite to stopping spikes/surges or electrical noise contaminating whole circuits. DRM95 is relied on in these and many more similar type applications.

Cleans, protects and can fix these sorts of problems

- 1 Massive surge protection
- 2 Lighting interference
- 3 Speaker hissing noise
- 4 Thumping noise from sub woofer
- 5 Reduces pixelation
- 6 Blurred picture
- 7 Picture scrambling
- 8 Hum noise



The Thor SmartBrain not only protects from surges, it also filters and cleans electrical frequency noise to give you unbeatable sound and video quality. Enjoy a truer AV experience with better picture quality and purer sound. Can also improve computer gaming speeds and fix internet dropouts.

TECHNICAL SMARTS

Product Dimensions: 105mm(W) x 96mm(H) x 60mm(D) | Supply voltage 240V AC 50Hz | Maximum current rating 30amps/7200 W (VA) | Clamping Voltage 275VAC | Reaction speed less than 1 nanosecond | Maximum transient spike impulse current (Amps) 76,000 amps | Maximum Energy Dissipation (Joules) 2320 Joules | EMI/RFI Noise Reduction Filter Types - Dynamic Active Tracking (SmartBrain Active Filter) | Protected AC Incorporating 32 separate protection components | Earth Leakage Range Less than 1 milli amp | Operating Conditions Indoor/AC Mains | Operating Temperatures -10C/+60C | Enclosure - Wide din rail 105mm | Model No. DRM95 30A.

INSIDE THE SMART BRAIN

SmartBrain has a premium filter technology called Dynamic Active Tracking. This unique filter has the best chance of "cleaning" electrical noise because it shields around 70% more frequencies when compared to other filters. It is an Active filter and can "clean" unwanted frequencies on both the upward curve and the downward curve of a sine wave (power). Most other filters only work at the crest of the wave and therefore miss a huge section of these unwanted frequencies that can generate noise on sensitive electronic devices.

 AUSTRALIAN DESIGNED AND ENGINEERED

 ALL R&D CARRIED OUT IN AUSTRALIA AND NEW ZEALAND

Made in China

DRM750 & 1050 RIPPLE FILTERS




AC MAINS FILTERED PROTECTION




RIPPLE
THOR

MODELS:
DRM750 RIPPLE
DRM1050 RIPPLE

FEATURES

-  **10A MODELS**
-  **COMPACT DESIGN HOUSING**
-  **NEEDS ELECTRICIAN TO INSTALL**
-  **1 YEAR REPLACEMENT WARRANTY**

IMPROVES

-  **WHOLE CIRCUIT LIGHTING**
-  **LED LIGHTING FLICKER**
-  **DIMMER CONTROLS**
-  **NOISY FAN MOTORS**
-  **AIR-CONDITIONERS**
-  **OTHER TYPE SENSITIVE ELECTRONICS**

MODELS: **DRM750 & DRM1050**

RIPPLE FILTERS

WHAT IS A RIPPLE?

The low-level signal voltages or ripple control signals injected into the distribution network at various frequencies are used to control off-peak appliances. Mains signalling is also referred to as ripple control signals. The signals are commonly used to switch the metering for hot water and heating systems. Generally, the power utility will use a specific frequency for a Suburb and a different frequency for a neighbouring Suburb.

The two most common frequencies are 1050Hz and 750Hz. The DRM1050 and DRM750 are filters designed to reduce or eliminate the effects of mains signalling that some power utilities generate.

What can be affected by Ripple Control Signals?

- 1 LED flickering
- 2 Dimmer controls
- 3 Fan motor noise
- 4 Motor noise
- 5 Electrical equipment randomly switching on/off



Did you know?

Signalling only used to be an issue at specific times of the day and usually only for a few minutes at a time.

The use of the Ripple Signal has expanded to load shedding, controlling street-lights, air-conditioners and other similar equipment that are now required to meet new standards so equipment controlled by Ripple Control Signals is becoming more common. Signalling can be more evident from early am to late pm. So basically anytime of day or night.

WHAT DOES THE DRM1050 AND DRM750 RIPPLE FILTER DO?

DRM1050 is a Din Rail Mount, 10A 230/240V Filter custom designed to specifically reduce or cancel the effects of the 1050Hz ripple frequency. The DRM750Hz is a Din Rail Mount, 10A 230/240V Filter custom designed to specifically reduce or cancel the effects of the DRM750Hz ripple frequency.

On some Phase Cut Dimmer modules the Thor Ripple filter can provide improvements to Dimming Range, Cold Start Values, Dimming Curve and improve the overall reliability and consistency of the performance of the dimming on your LED lights.

One of the challenges with the inclusion of a ripple filter is that each site is unique and different. The mains supply is affected by distance from sub stations, voltage, load and the variation of connected electrical equipment can all contribute to changing the effects of the mains signalling. This means one site may experience 100% elimination while another in the same or neighbouring Suburb may get only a partial improvement. This is not a fault of the filter but rather the result of all the other contributing variables involved.

TECHNICAL SMARTS

Supply Voltage: **230/240V AC 50Hz** | Max Current Rating: **10A** | Max Connector Rating: **10A** | Active Filter Frequency: **750Hz or 1050Hz** | Depth: **-45dB Max** | For use on lighting circuits only when AM Ripple modulation Depth is not greater than 40%.
Model: DRM750 and DRM1050

 **AUSTRALIAN DESIGNED AND ENGINEERED**

 **ALL R&D CARRIED OUT IN AUSTRALIA AND NEW ZEALAND**

Made in China

PRODUCT COMPARISON

PARENT CATEGORY		ELITE FILTERING ZONE - DYNAMIC ACTIVE TRACKING						
PLUS 70% MORE COMPARED TO *AUSTRALIAN INDUSTRY STANDARD								
FAMILY	PRODUCT FAMILY DESCRIPTION	PS10	PS20	P8	A12BF	CM90	DRM95 20A	DRM95 30A
		Smart Series	Smart Series	Prodigy	Smart Series	Smart Series	Smart Series	Smart Series
PRODIGY	Patented Technology			✓				
SMART SERIES	Smart Series Range	✓	✓		✓	✓	✓	✓
Problems We Can Fix								
Parent Category	Performance Improvements	PS10	PS20	P8	A12BF	CM90	DRM95 20A	DRM95 30A
Audio Related Issues	Hissing or Thumping Noises (speakers)	✓	✓	✓	✓	✓	✓	✓
	Humming sound	✓	✓	✓	✓			
	Low End Dynamic Loss	✓	✓	✓	✓	✓	✓	✓
	Blacker Sound	✓	✓	✓	✓	✓	✓	✓
	Guitar/Keyboard Amps	✓	✓	✓	✓	✓	✓	✓
	Need to lower noise floor	✓	✓	✓	✓	✓	✓	✓
	Muddy Sound	✓	✓	✓	✓	✓	✓	✓
	Earth Loop/ Hum reducing	✓	✓	✓	✓	✓	✓	✓
Visual Related Issues	Flickering Images	✓	✓	✓	✓	✓	✓	✓
	Freezing image	✓	✓	✓	✓	✓	✓	✓
	True 4K/8K viewing	✓	✓	✓	✓	✓	✓	✓
	Colour Loss	✓	✓	✓	✓	✓	✓	✓
	True Colours (Deeper Blacks/Vivid Colours)	✓	✓	✓	✓	✓	✓	✓
	Pixelated or Blurred Images	✓	✓	✓	✓	✓	✓	✓
	General Visual "Noise"	✓	✓	✓	✓	✓	✓	✓
	Improved Streaming	✓	✓	✓	✓	✓	✓	✓
Computer and Network Related Issues	Improved Gaming Speeds	✓	✓	✓	✓	✓	✓	✓
	Slow Internet Speeds	✓	✓	✓	✓	✓	✓	✓
	Internet Dropouts	✓	✓	✓	✓	✓	✓	✓
	System Hangs	✓	✓	✓	✓	✓	✓	✓
	UPS Issues	✓	✓	✓	✓	✓	✓	✓
Miscellaneous Home Appliance Issues	Switch Mode Power Supply Noise	✓	✓	✓	✓	✓	✓	✓
	Motor Burn Out	✓	✓					
	General Electrical Noise	✓	✓	✓	✓	✓	✓	✓
	Flickering or Pulsing Lights		✓			✓	✓	✓
	Improved Dimming Controls (Lighting)					✓	✓	✓
	Effects of Ripple injected Signals							
	Appliance	PS10	PS20	P8	A12BF	CM90	DRM95 20A	DRM95 30A
	Home Theatre	✓	✓	✓	✓	✓	✓	✓
	2 Channel Audio Systems	✓	✓	✓	✓	✓	✓	✓
	Recording Studios	✓	✓	✓	✓	✓	✓	✓
	Smart Home Devices	✓		✓	✓			
	PCs and Laptops	✓	✓	✓	✓			
	Whitegoods					✓	✓	✓
	Rack Mounted Devices		✓				✓	✓
	Consumer Electrical Products	✓	✓	✓	✓			
	Lighting Systems					✓	✓	✓
	AirConditioning and HVAC					✓	✓	✓
	General Office Equipment	✓	✓	✓	✓			
	Home/Business Security Systems		✓			✓	✓	✓
	Whole Circuit Solutions		✓			✓	✓	✓
	Pumps and Electric Motors		✓			✓	✓	✓
	Electric Gates and Weighbridges	✓	✓	✓	✓	✓	✓	✓
	Industrial Electrical Equipment	✓	✓	✓	✓	✓	✓	✓

* Australian Industry Standard references our testing against over 9 Brands and over 20 models on the market and found our Products performed better on filtering out unwanted and harmful frequencies.



FREQUENTLY ASKED QUESTIONS

Have a question, we may have the answer below.

1. How do I know the THOR product is still protecting my equipment?

The models have 'On' lights to inform the user that the unit is connected to power. For as long as the product is letting power through to your equipment, it is filtering and protecting. If it stops protecting, it will stop letting power through and you simply contact us for replacement instructions.

2. What is the Earth light for?

One of the reasons our models enjoy a longer life expectancy than other brands is because when a spike or surge is detected the first action is to discharge this dangerous high voltage incident to Earth. This diversion usually caters for 99% of common daily surges with 100% discharge. It's only in extreme surge incidents, where the diversion cannot be 100% contained, that the protection circuit is called on to work. In those cases, the "overflow" is taken care of by the protection circuit. To maximise efficiency, the power point Earth connection needs to be effective. If our product does not detect a good connection, then the Earth LED will not illuminate. Note: The Earth LED has no effect to the protection circuit function. If there is no Earth LED lit on our model the connected device/s will still be protected.

3. I can sometimes hear "beeping" coming from my THOR product, what does this mean?

Some models include an alarm buzzer that may intermittently emit short "beeps". All is Ok. Don't be alarmed as it is just letting you know it has detected some minor spikes or surges and is doing its job.

If the "beeping" alarm becomes constant, then the protection has been compromised. Should this occur, you should immediately purchase a new THOR product to ensure your connected devices continue to be protected against further surges.

4. Can a power filter improve my system performance?

There is no question that good quality power filtration will allow your equipment to perform closer to its maximum potential by only allowing clean power to its operating circuits. There have also been many reports that quality power filtration improves sound quality, screen technology images are crisper, and colour definition is articulated. Our Dynamic Active Tracking filters have had improvements as high as 70% when compared to Australian Industry Standards in other brands. Have a look at our Smart Power Station combination if you are after the 'Rolls Royce' power conditioning solution.

5. Does a power filter deteriorate over time?

Yes. Think of a power filter like a battery. A battery will not maintain the charge of its original capacity over time. This is normal. So too with a power filter circuit. It may not "clean" all the unwanted frequencies over time. If the filter originally prevented issues like "hissing" noise from speakers, thumping from sub woofers, pixilation, streaming or internet dropouts then it may be time to upgrade. This is generally only noticeable if you are trying to "fix" a specific issue. It may take 3 or 4 years before getting to this point.

6. How many times will a THOR filter work? Do I have to replace it if it gets a surge or spike?

A surprising number of the damaging and degrading spikes and surges occur without our knowledge. Many of them are even caused by other appliances and events in our home or office ... such as switches turning off and on, motors starting and stopping etc. These events are taken care of 24/7 by your THOR product, the only possible loss being some of the joules of energy absorption available. When the available number of joules has been used up, it will simply stop letting power through to your equipment. Should this happen simply contact us and we will advise from there.

7. Will this THOR board protect my equipment from lightning?

The closer your home or office is to a direct lightning strike the greater the risk of equipment damage. As lightning travels at around 300,000 kms per second, nothing designed by man will stop a direct hit. However the odds of direct hit are quite rare and Thor products can certainly minimise the risk of damage. The degree of risk reduction is usually measured by the specifications, the faster the unit reacts combined with the amount of energy it can absorb. The unit of measurement is usually stated in Joules.

Thor will honour its warranty even if there is direct hit of lightning.

FREQUENTLY ASKED QUESTIONS CONTINUED

8. Why do I need Power Protection now – I have never had any trouble from power surges or lightning?

Technology has taken us into a new era in equipment. Everything is faster, smaller, hotter (today's equipment runs at much higher temperatures and the new digital age is much less tolerant to power pollution and voltage fluctuations). Even the power utility companies that supply the power to your premises will recommend that all their customers use quality filtered power protection.

On top of this you may be surprised to learn that if you do not take 'reasonable care' to protect your electrical equipment and it does get damaged, your insurance company may not cover your claim. Ouch!!

9. Why does Thor go to so much trouble providing separate groups of filter banks on 8 outlet models?

This allows the user to isolate different types of appliances from each other. It is a way to reduce or prevent device "cross talk" where two devices on the same circuit might cause unwanted performance issues. Our use of separate Earth lines for each circuit is an Earth Loop/Hum reducing feature. As far as we are aware, we are the only manufacturer with this feature. Audiophile and Hi Fi enthusiasts asked us for this and we delivered!

10. Can a power filter improve my sound system performance?

There is no question that good quality power filtration will allow your equipment to perform closer to its maximum potential by only allowing clean power to its operating circuits. There have also been many reports that quality power filtration improves sound quality. Prodigy and Smart Series Dynamic Active Tracking filters have had improvements recorded (check out our testimonials) but as this is a subjective observation by individuals on their particular equipment (brand and selection of equipment), it is something that you, the owner, will have to decide. We believe there are definite improvements in performance and reliability with the use of our Smart Series Power filters. Have a look at our Smart Power Station combination if you are after the 'Rolls Royce' power supply option.

11. I have an earth leakage device fitted to my house, why do I need a Power Filter?

Earth leakage devices, or safety switches as they are more commonly known, are compulsory in new buildings in all states of Australia and we all applaud that. However, you must understand they are designed to protect people against electrocution. These devices do not protect equipment; in fact they will trip when a short circuit occurs in an appliance; this is after the appliance has already been damaged.

Our THOR products are constantly monitoring and correcting the incoming voltage and current preventing damaging and disruptive polluted power from ever reaching valuable equipment.

12. Why is a full filtered surge device better?

All of today's high-tech equipment will perform better if it is receiving only clean sine wave power. This is even more critical when protecting equipment with IC chips or motherboards. 98% of electronic equipment contains IC chips or motherboards today.

13. What does the electrical approval number on power protection mean?

It means the product has been manufactured to Australian Standards for electrical safety. It is not an approval for actual function which is why what is inside your protection device is so important. Always compare circuit design if you are serious about protecting your expensive equipment. Beware of gimmick selling and silly promises.

14. Do you have a connected equipment warranty?

Yes, we do on all our plug-in range of products. We decided to stand by our products and have various levels of connected equipment cover from up to \$100,000 to \$500,000 cover depending on the product. Full conditions are documented and included with each product.

FREQUENTLY ASKED QUESTIONS CONTINUED

15. Do I need to plug my power packs into a Power Filter?

It can't hurt but transformers convert AC incoming power to DC outgoing power and are considered low risk from most forms of power disturbances, so if you have spare outlets on your board by all means use your filter protection ... but it is certainly not a priority.

Note: Thor products discharge antenna and data/network borne spikes directly to earth not through the common earth on the power board as is the practice with most other manufacturers.

16. What is the warranty on THOR products?

Thor products have a full 6 years no fuss product replacement warranty. The reason this definitive period was selected rather than say offer a lifetime warranty is because most people surveyed felt lifetime was a little grey. For instance, is it the product's lifetime and if so, then if it 'blows' after a week does that determine the expected life of the product? We chose to use the internationally recognised formula that dictates all components have an expected life of 50,000 hours which equates to 6 years.

17. I have an earth diverter fitted in my fuse box, why do I need a power filter?

A surge diverter does exactly that: it diverts surges and transients direct to earth as they enter the building. It will not prevent noise pollution and it will not stop surges and transients which occur after it.

There are two areas that most transients originate from: 1. The power grid network of supply, prior to reaching your building and your earth diverter is good for these and 2. Electrical shorts, faults, and noise pollution from within your building. This is very common and is the major source of dirty or polluted power, something today's IC chip and motherboard incorporated equipment hates.

THOR models' filter banks isolate groups of valuable equipment from the rest of the dwellings supply and go even further on the 'A' and 'B' series isolating individual appliances from each other at filter level. Of course there is the added advantage to property renter when they move, as they can take their protection with them.

If your question is not here, please do not hesitate to contact us and we will gladly help find a solution for you. Please call 1300 766 140 or visit thortechnologies.com.au.



ENGINEERING INNOVATIVE
POWER FILTRATION
AND PROTECTION PRODUCTS



1300 766 140 | thortechnologies.com.au