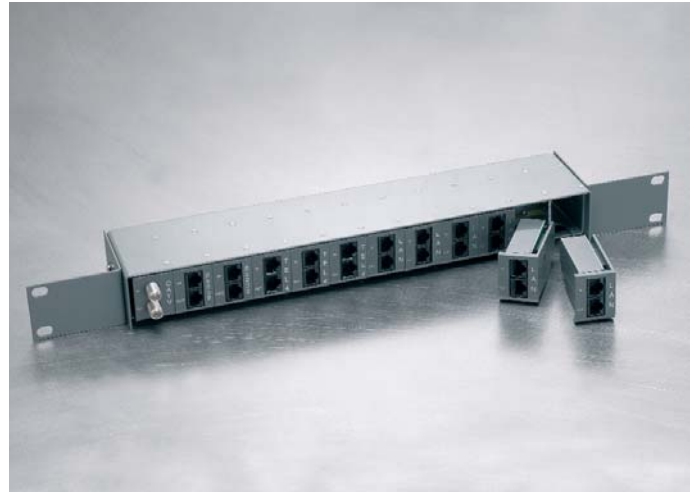# RackShield

19" Rack mountable user configurable surge protection

- **Modular design – up to 12 customer installable pick and mix modules**

- **Guaranteed earthing of inserted modules**

- **Advanced solid state technology with auto-recovery Silicone Avalanche Diodes**

- **All modules are UL 497A or UL 497B Listed**

- **Fits into standard 19" cabinet or can be wall mounted**

- **10 year product warranty**

**The Rackshield surge protection solution** provides vital protection for up to 12 ports in a 19" rack format. Modules slide into RackSheild providing customer configurable communication protection for telephone lines, networks, cable/digital Satellite, Lease Line, RS232, 4-wire dial-up, ADSL, T-1 and DDS applications.

**Slide in modules allow the RackShield to be configured** to the requirements of your business and can be removed, reorganised or replaced by the end user at any time. Each RackShield unit can house 12 RackShield modules and any combination of these modules can be installed in any given device. This unique user configurable system allows the RackShield to provide flexible upgradeable surge protection that can easily be adapted to suit your changing requirements.

**Advanced solid state surge protection technology** is employed in the modules and each one is able to safely dissipate surge currents up to 1kA and will automatically reset in readiness for the next surge or transient overvoltage. With 9 modules to choose from, RackShield can protect against surges conducted through a wide range of data and communications lines. Each module slides in and locks securely into the RackShield enclosure earthing itself automatically and can be installed or removed without the use of tools.

**The 19" rack mountable enclosure of the RackShield** allows it to be conveniently mounted alongside the equipment it is protecting, fitting neatly into any standard 19" rack or cabinet. Occupying only 1U of rack space, each RackShield provides surge protection for up to 12 communications or data ports making it ideal for surge protection in IT and telecommunications

distribution environments.

**Reversible brackets allow the RackShield to be wall mounted** for locations where a 19" rack or cabinet is not available such as a small office or home office environment or near a home entertainment system.

**A 10 Year 'No Fuss' warranty** comes as standard with the RackShield as with all MTL Surge Technologies products so in the unlikely event your RackShield fails we will replace it.

# Network & Comms Protection

# Specification

All figures typical at 25°C (77°F) unless otherwise stated

**Maximum surge current**
> 1kA

**Limiting voltage**
> See table to right

**Response time**
> Instantaneous

**Dimensions**
> Length  483mm (19")
> Depth  70mm (2.75")
> Height  40mm (1.625")

**Weight**
> 0.45kg (1 lb)

## To order specify –

**RackShield**
> 24280

**Protection modules**

| | |
|---|---|
| **24201** | (TEL, 2-wire dial-up) |
| **24202** | (LAN, 10/100Base-T) |
| **24203** | (CATV, F-type coaxial) |
| **24207** | (4-wire, dial-up) |
| **24208** | (RS232, 8-wire) |
| **24209** | (Lease Line, 4-wire) |
| **24210** | (DDS, 4-wire) |
| **24211** | (T-1, 4-wire) |
| **24212** | (ADSL, 4-wire) |

Note: all modules include patch cable

## Protection modules

Self-earthing communication modules to customise your RackShield

| Model | Part # | Type | Maximum surge current (kA) | Working voltage (V) | Limiting voltage (V) | Bandwidth | Connectors |
|---|---|---|---|---|---|---|---|
| TEL | 24201 | 2-wire dial-up | 1 | 190 | <300 | N/A | RJ11 |
| LAN | 24202 | 10/100Base-T | 1 | 5 | 10 | 155MHz | RJ45 |
| CATV | 24203 | F-type coaxial | 1 | 30 | 45 | 2GH | F-type coaxial |
| 4-wire | 24207 | 4-wire dial-up | 1 | 190 | <298 | N/A | RJ11 |
| RS232 | 24208 | 8-wire | 1 | 18 | 27 | 0.5MHz | RJ45 |
| Lease Line | 24209 | 4-wire | 1 | 50 | 105 | N/A | RJ11 |
| DDS | 24210 | 4-wire | 1 | 50 | 105 | 10MHz | RJ48S |
| T-1 | 24211 | 4-wire | 1 | 18 | 27 | 50MHz | RJ48C |
| ADSL | 24212 | 4-wire | 1 | 190 | 300 | 50MHz | RJ11 |
| VOIP | 24213 | 8-wire | 1 | 24 | 45 | 155MHz | RJ45 |



**Figure 1**  Dimensions
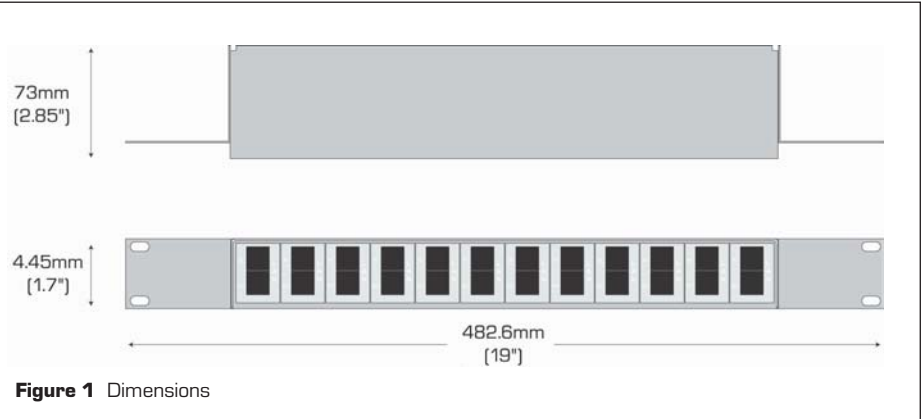


Modules easily slide into the RackShield and automatically ground themselves
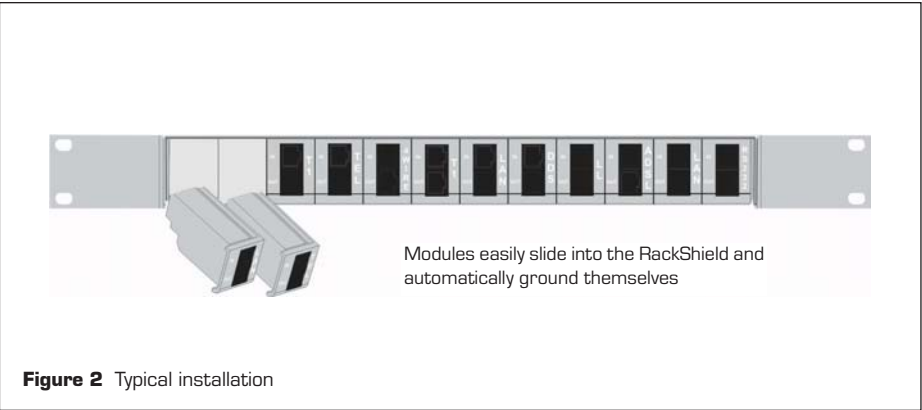
**Figure 2**  Typical installation

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