ZoneBarrier

Protects network and communications applications against induced surges and transients

- **Wall, DIN rail or 19" rack mountable**

- **Expandable, modular protection for one to an unlimited number of ports**

- **Three stage protection**

- **UL 497A Listed**

- **Tested to IEC 61000-4-5 and CCITT K1**

- **10 year product warranty**

The ZoneBarrier Series is a unique, modular protection system for tele-communication equipment. By providing an effective barrier between uncontrolled transient environments and your valuable equipment the ZoneBarrier Series protects you from costly system down time and equipment failure.

Designed for multi-port or single-port applications the ZoneBarrier Series offers a flexible, bespoke, surge protection solution that is capable of growing with your requirements. A ZoneBarrier module can be used as a stand alone device, providing protection for a single modem or fax machine perhaps, or as a building block in a surge protection solution that exactly fits your requirements.

The sophisticated hybrid circuitry employed by the ZoneBarrier Series protects your equipment without impeding normal operation. ZoneBarrier protection components comprise of a combination of solid state overvoltage protectors (sidactors) and positive temperature coefficient (PTC) devices to form three distinct stages of protection. This com-bination of high quality surge protection components gives the ZoneBarrier Series its characteristic low limiting voltage and high surge current capacity which provides excellent protection.

All common telecommunication systems can be protected by the ZoneBarrier Series. ZoneBarrier modules are available for Leased Line, Digital Data Service, T1, E1 and 2-wire ISDN and are available with a range of connection types.

The small foot print of ZoneBarrier modules allows a single module to be conveniently located near to the equipment it is protecting. Where multiple modules are required in a concentrated area ZoneBarrier modules can be mounted on standard DIN rail. Optional DIN rail assemblies are available including

one suitable for 19" rack applications, which can hold up to 32 ZoneBarrier modules, providing protection of an impressive 32 lines in less than a 3U space (13.2cm).

Additional protection circuitry should be provided for other systems which may be interconnected with your telecommunication equipment e.g. power feeds, IT networks, fire and security systems. ZoneBarrier modules are available to meet these requirements.

Telecom Protection

Specification

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

Ambient temperature limits
    −4°F to +185°F (working)
    −20°C to +85°C (working)
Humidity
    95% RH (non-condensing)
Casing
    Moulded plastic
Weight
    2.8oz (0.08Kg)
Dimensions
    See figure 1
EMC compliance
    BS EN 60950: 1992
    BS EN 61000-6-2: 1999
    BS EN 61010-1: 1993
R&TTE compliance
    BS EN 50082-2: 1995
    BS EN 41003: 1999

Model	Type	Maximum surge current (kA)	Wires	Working voltage (V)	Let-through voltage (V)	Bandwidth (MHz)	Connectors
ZB24501	Dial up	3	2	200	270	N/A	RJ11
ZB24503	Leased line	3	4	75	105	N/A	RJ11
ZB24504	Leased line	3	4	75	105	N/A	Terminal strip
ZB24505	Digital data	3	4	75	105	>10MHz	RJ48S
ZB24506	Digital data	3	4	75	105	>10MHz	Terminal strip
ZB24525	Dial up	3	4	200	270	N/A	RJ11
ZB24549	ISDN	3	2	75	105	>80MHz	RJ11
ZB24558	T1	3	4	16	28	>50MHz	RJ48C
ZB24562	ADSL	3	4	200	270	50MHz	RJ11

Installation

All ZoneBarrier modules are installed in-line and are identified with "Protected" and "Unprotected" for fail-safe installation.

DIN rail mounting (figure 2)

ZoneBarrier modules can be mounted on any standard T-section DIN rail or on the optional rail assemblies listed below (see the 'To order' section for part numbers and further details). These assemblies will accommodate a mix of up to 32 ZoneBarrier modules and can be mounted on any flat surface or in a 19" rack.

To attach the ZoneBarrier module to the rail, simply locate the DIN rail foot of the module over on edge of the DIN rail and then securely push the ZoneBarrier into place. Note the DIN rail must be properly grounded (earthed).

Stand-alone installation (figure 3)

To install a ZoneBarrier module as a stand-alone protector, attach a ground (earth) lead to the supplied ring terminal and secure this with the self tapping screw provided to the base of the unit. Using screws (or bolts) mount the module on any flat surface.

To order specify -

Model number as per specification table above

Mounting options

DR21605 5" DIN rail for up to 4 ZoneBarriers
DR21649 17.5" DIN rail for up to 16 ZoneBarriers
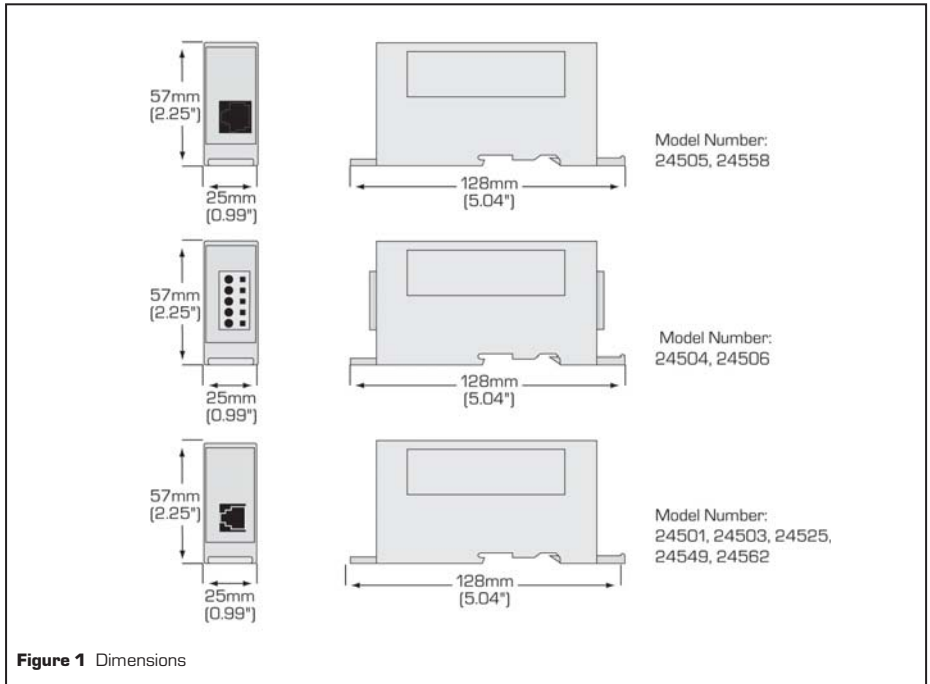**DR24500** 19" DIN rail (with mounting brackets) for up to 32 ZoneBarriers
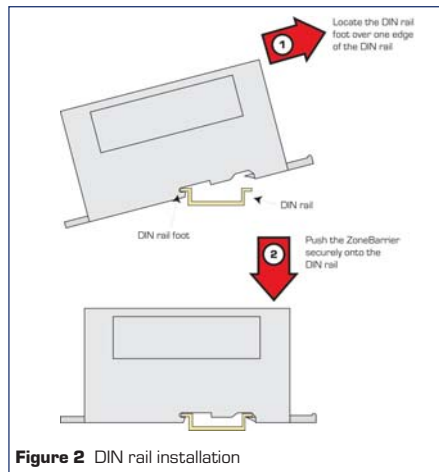

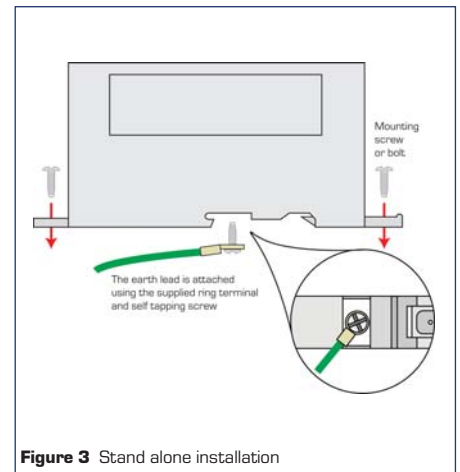**Figure 1** Dimensions

Figure 2 DIN rail installation

Figure 3 Stand alone installation

Approvals

Country	Standard/Authority	Approved for	Product
United States Canada	UL 497A Listed	Telecommunications	ZB24501, ZB24503, ZB24504, ZB24505, ZB24506, ZB24525, ZB24549, ZB24558, ZB24562