



technical datasheet

ZoneBarrier Network

Protects network and communications applications against induced surges and transients

- Modular, expandable protection for one to an unlimited number of ports
- Wall, DIN rail or 19" rack mountable
- Wide range of connector types available
- Three stage protection
- Category 6 universal model available
- 10 year product warranty



The ZoneBarrier Series is a uniquely modular communication line interface protection system for IT networks and industrial communication systems. By providing an effective barrier between uncontrolled transient environments and your valuable electronic systems, the ZoneBarrier Series protects against costly system down time and equipment failure.

The sophisticated hybrid circuitry employed by the ZoneBarrier Series protects your equipment without impeding normal operation. ZoneBarrier protection components comprise a combination of high energy Gas Discharge Tubes with ultra-fast diodes and Silicon Avalanche Diodes. This combination of high quality surge protection components gives the ZoneBarrier Series its characteristic low let-through voltage and high, 10kA, surge current capacity which provides excellent protection. ZoneBarrier devices have RJ45, terminal strip or pluggable terminal strip connectors.

Designed for multi-port or single-port applications the ZoneBarrier Series offers a flexible 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 workstation, or as a building block in a surge protection solution, as simple or as complex as your requirements, now and in the future.

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, ZoneBarrier units can be mounted on standard DIN rail. A DIN rail kit is also available for 19" rack applications which can hold up to 32 modules, providing protection of an impressive 64 100Base-T lines while occupying less than 5.2 inches (or a 3U space).

All widely used network systems can be protected by the ZoneBarrier Series. ZoneBarrier modules are available for 100Base-T, 1,000Base-T, 10Base-2, RS232, RS422, RS423 and others with a range of connector types to suit all common network applications.

Additional protection circuitry should be provided for other parts of the network, or other systems which may be interconnected, e.g. incoming AC power, telephone wiring, fire and security systems, etc. ZoneBarrier modules are available to meet these requirements, contact your local supplier for details.

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SPECIFICATION

Maximum load current

0.5 Amps

Ambient temperature limits

-40°F to +185°F (working)
-40°C to +85°C (working)

Humidity

95% RH (non-condensing)

Casing

Molded plastic

Weight

2.8 oz (0.08Kg)

Dimensions

See figure 1

EMC compliance

BS EN 60950: 1992
BS EN 61000-6-2: 1999
IEC 61000-4-5 and CCITT K17

Model	Type	Maximum surge current (kA)	Wires	Working voltage (V)	Let-through voltage (V)	Bandwidth (MHz)	Connectors
ZB24509	RS232	3	4 + Shield	15	27	0.5	Terminal Strip
ZB24510	RS232	3	5	15	27	0.5	Terminal Strip
ZB24511	RS232	3	8	18	27	0.5	RJ45
ZB24518	RS485	10	2	5	10	50	Terminal Strip
ZB24528	RS422	10	4 + Shield	8	15	50	Terminal Strip
ZB24537	DS3	10	Coax	8	30	70	BNC
ZB24540	100Base-T*	1	8	5	10	155	RJ45
ZB24550	100Base-T*	1	2 x 4	5	10	155	2 x RJ45
ZB24563	1000Base-T+	1	8	5	10	250	RJ45

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 19" DIN rail assembly. To attach the ZoneBarrier module to the DIN rail, simply locate the DIN rail foot of the module over on edge of the DIN rail and then securely push the ZoneBarrier onto the DIN rail. Note the DIN rail must be properly grounded.

Stand-alone installation (figure 3)

To install a ZoneBarrier module as a stand-alone protector, attach an ground 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.

DIN rail mounting options

- DR21607** 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

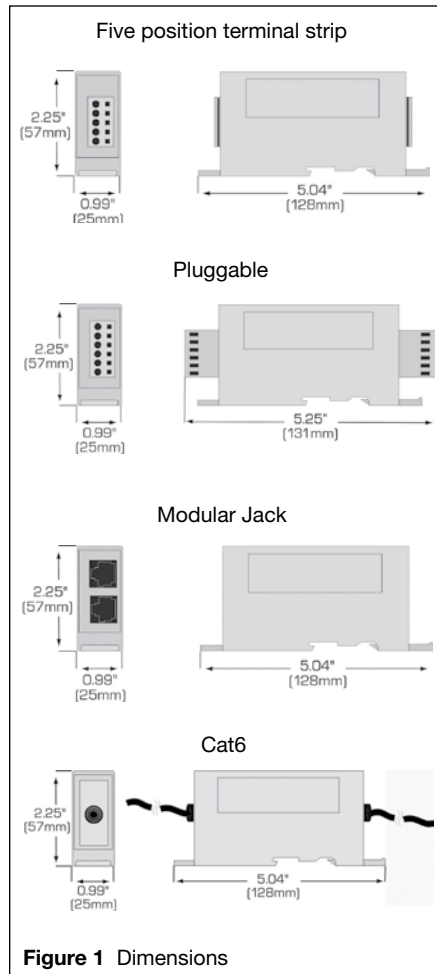


Figure 1 Dimensions

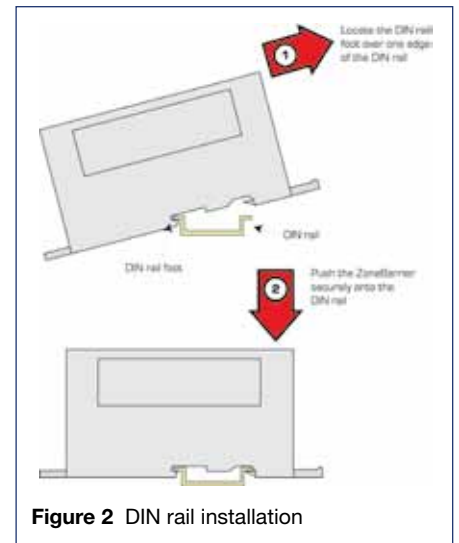


Figure 2 DIN rail installation

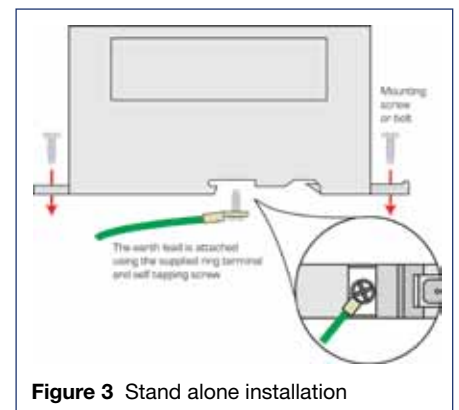


Figure 3 Stand alone installation

Approvals

Country	Standard/Authority	Approved for	Product
United States & Canada	UL 497B Listed UL Certified Cat.5	Networks	ZB24528, ZB24540, ZB24563

The given data is only intended as a product description and should not be regarded as a legal warranty of properties or guarantee. In the interest of further technical developments, we reserve the right to make design changes.



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