Data & signal protection
ESP D & TN Series

LPZ 0→3	FULL MODE Bonding + Equipment Protection	SIGNAL/ TELECOM TEST CAT D + C + B	e ENHANCED Low let-through voltage	LOW IN-LINE RESISTANCE 9.4 Ω	CURRENT RATING 300 mA
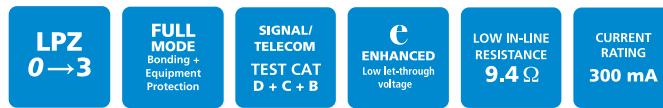
Combined Category D, C, B tested protector (to BS EN 61643) suitable for most twisted pair signalling applications. Available for working voltages of up to 6, 15, 30, 50 and 110 Volts. ESP TN suitable for Broadband, POTS, dial-up, T1/E1, lease line and *DSL telephone applications. For use at boundaries up to LPZ 0 to protect against flashover (typically the service entrance location) through to LPZ 3 to protect sensitive electronic equipment.

Features & benefits

– Very low let-through voltage (enhanced protection to IEC/BS EN 62305) between all lines - Full Mode protection
– Full Mode design capable of handling partial lightning currents as well as allowing continual operation of protected equipment
– Repeated protection in lightning intense environments
– Low in-line resistance minimizes unnecessary reductions in signal strength
– Strong, flame retardant, ABS housing
– Supplied ready for flat mounting on base or side
– Built-in DIN rail foot for simple clip-on mounting to top hat DIN rails

– Colour coded terminals give a quick and easy installation check - grey for the dirty (line) end and green for the clean end
– Screen terminal enables easy connection of cable screen to earth
– Substantial earth stud to enable effective earthing
– Integral earthing plate for enhanced connection to earth via a CME kit
– ESP 06D and ESP 50D have PADS reference 086/000551 (ESP 06D) and 086/000553 (ESP 50D)
– ESP TN is suitable for telecommunication applications in accordance with Telcordia and ANSI Standards (see Application Note AN005)

Application
Use on twisted pair lines, e.g. those found in process control equipment, modems and computer communications interfaces.

Installation
Connect in series with the data communication or signal line either near where it enters or leaves the building or close to the equipment being protected (e.g. within its control panel). Either way, it must be very close to the system's earth star point. Install protectors either within an existing cabinet/cubicle or in a separate enclosure.

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Accessories

Combined Mounting/Earthing kits:
CME 4 Mount & earth up to 4 protectors
CME 8 Mount & earth up to 8 protectors
CME 16 Mount & earth up to 16 protectors
CME 32 Mount & earth up to 32 protectors

Weatherproof enclosures:
WBX 2/G
For use with up to 2 protectors
WBX 3, WBX 3/G
For use with up to 3 protectors

WBX 4, WBX 4/GS
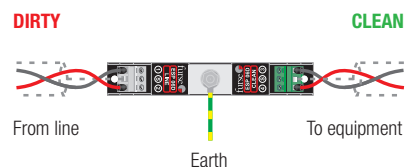For use with a CME 4 and up to 4 protectors
WBX 8, WBX 8/GS
For use with a CME 8 and up to 8 protectors
WBX 16/2/G
For use with one or two CME 16 and up to 32 protectors

Full product range order codes can be found on pages 17/8-17/9

Install in series (in-line)

DIRTY   CLEAN

From line   To equipment

Earth

NOTE: Derivatives of these protectors are available ready-boxed to IP66, for use in damp or dirty environments. Slim Line (ESP SL), ATEX (ESP SLX) and PCB mount (ESP PCB) versions are also available. If your system requires a protector with a very low resistance or higher current, see the ESP E & H Series. Also use the ESP E Series for systems needing a higher bandwidth. Protectors for 3-wire (ESP SL/3W) and RTD (ESP RTD, ESP SL RTD) are available, as are the space saving protectors (ESP Q, ESP SL Series). The ESP KT and TN Series are additional protectors specifically for telephone lines. The ESP KS Series are protectors for data and signal lines on an LSA-PLUS module.