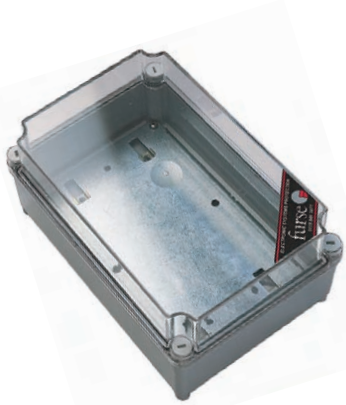# Protector accessories
WBX Series

WBX Series

WBX Series

A range of moisture and dirt resistant enclosures for the convenient installation of ESP protectors and their associated CME with grey base and either a see-through or grey (part number /G or /GS) lid.

Features & benefits

– Tough polycarbonate enclosures (except ABS WBX 2/G)
– Weatherproof with IP resistance to dirt and water of IP56 or more
– Clear lid enables easy visual inspection of the protector's visual status indication (WBX 3, WBX 4, WBX D4, WBX 8, WBX D8, WBX M2, WBX M4)
– Grey lid for applications not needing regular protector inspection (WBX 2/G, WBX 3/G, WBX 4/GS, WBX 8/GS and WBX 16/2/G)
– For external CCTV and other installations requiring added security the WBX 4/GS and WBX 8/GS are supplied with an opaque lid and special secure head screws (plus tool)
– Supplied complete with metal base (mounting) plate with pre-prepared mounting positions and fixing hardware for easy installation (except WBX 2/G which has a plain metal base)

Application

Use on coaxial cables to protect RF transmitter and receiver systems, including electronics located at the antenna or dish. Typical examples include cell sites, military communications, satellite earth stations, pager systems and emergency services communications systems.

Installation

The protector(s), or CME kit, are mounted on the metal base plate, which in turn mounts in the enclosure.

WBX Series - Technical specification

Enclosure Part No.	For Use with Following Protectors	Enclosure Part No.	For Use with Following Protectors
WBX D4	1 ESP 240 or 415/XXX/TNS or TNC protector, or single phase D1 series protector	WBX M4	1 ESP M4 series protector
		WBX 4 or the secure WBX 4/GS	1 CME 4 and associated protectors
WBX D8	1 ESP 415/XXX/TT protector, or three phase D1 series protector	WBX 8 or the secure WBX 8/GS	1 CME 8 and associated protectors
		WBX 16/2/G	1 or 2 CME 16 and associated protectors
WBX 3	1 single phase M1 series protector	WBX 2/G	1 or 2 single earth stud protectors
WBX 4	1 three phase M1 series protector	WBX 3/G	Up to 3 single earth stud protectors
WBX M2	1 ESP M2 series protector	WBX 3/G	1 double earth stud protector

	WBX 2/G	WBX 3 WBX 3/G	WBX 4 WBX 4/GS	WBX D4	WBX 8 WBX 8/GS	WBX D8	WBX 16/2/G	WBX M2	WBX M4
Weight: – Unit	0.45 kg	0.5 kg	0.9 kg	0.4 kg	1.3 kg	0.55 kg	6.4 kg	1.9 kg	2.2 kg
– Packaged	0.5 kg	0.55 kg	0.95 kg	0.45 kg	1.35kg	0.6 kg	7.6 kg	2.3 kg	3.0 kg
Dimensions:									
Length: – Internal	150 mm	222 mm	225 mm	–	225 mm	–	460 mm	254 mm	254 mm
– External	160 mm	230 mm	235 mm	200 mm	235 mm	200 mm	474 mm	280 mm	280 mm
Width: – Internal	110 mm	72 mm	150 mm	–	225 mm	–	380 mm	254 mm	254 mm
– External	120 mm	80 mm	160 mm	123 mm	235 mm	195 mm	396 mm	280 mm	280 mm
Depth: – Internal	71 mm	79 mm	100 mm	–	100 mm	–	120 mm	115 mm	165 mm
– External	90 mm	85 mm	117 mm	112 mm	117 mm	112 mm	128 mm	130 mm	180 mm
Fixing centres (mm)	148 x 90	210 x 60	215 x 140	140 centrally	215 x 215	140 x 88	380 x 310	254 x 254	254 x 254
IP rating	IP66	IP67	IP66	IP65	IP66	IP65	IP56	IP67	IP67

Protector accessories
CME Series

CME Series

CME Series

Enables groups of protectors to be simultaneously mounted and earthed via their earth stud. Suitable for installing protectors with one or two earth studs on their top face. Available with 4, 8, 16 and 32 mounting holes.

Features & benefits

– Enables quick and easy installation of protectors for added convenience
– Speedy installation of groups of protectors saves time and money
– Individual protectors can be changed without needing to remove others
– Sturdy construction
– Supplied with a choice of flat and round ended fixing screws to suit your application

Assembly of CME kit
Earth connection (not supplied)

Application

Use CME kits to simultaneously mount and earth groups of single and double earth stud protectors. Each single earth stud protector requires one CME mounting position and each double earth stud protector requires two CME mounting positions, this includes:

– High conductivity copper with electro-tin plating and nylon insulating pillars, for low impedance to earth
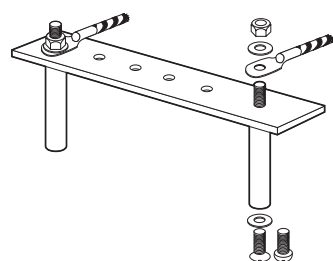
Single earth stud protectors which are:

– ESP 06D	– ESP 06E	– ESP 06H	– ESP TN
– ESP 15D	– ESP 15E	– ESP 15H	– ESP RTD
– ESP 30D	– ESP 30E	– ESP 30H	– ESP CCTV/B
– ESP 50D	– ESP 50E	– ESP 50H	– ESP CCTV/T
– ESP 110D	– ESP 110E	– ESP 110H	– ESP RS485

Double earth stud protectors which are:

– ESP 120-5A	– ESP 120-16A	– ESP 240-16A
– ESP 240-5A	– ESP 277-5A	– ESP 277-16A

Once you know how many CME mounting positions you require choose a CME kit to suit:

– CME 4 has 4 mounting positions
– CME 8 has 8 mounting positions
– CME 16 has 16 mounting positions
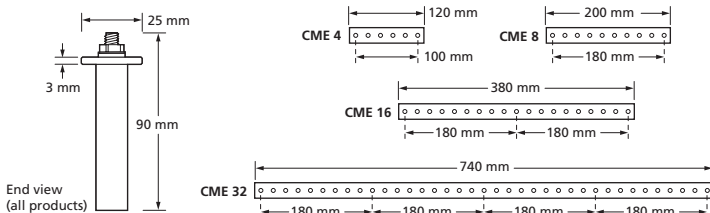– CME 32 has 32 mounting positions

Accessories

Enclosures suitable for a CME 4 and its associated protectors:
(WBX 4/GS), CME 8 and protectors **(WBX 8/GS)** or one or two **CME 16** and protectors **(WBX 16/2/G)**

Installation

The earth bar is supported by a series of mounting pillars (which are fixed to the cubicle or box base). Protectors are attached to the CME's earth bar via their earth stud(s) and earthed with shared connections to earth. We suggest one earth connection per mounting pillar.

End view
(all products)

25 mm
3 mm
90 mm

CME 4 — 120 mm / 100 mm
CME 8 — 200 mm / 180 mm
CME 16 — 380 mm / 180 mm — 180 mm
CME 32 — 740 mm / 180 mm — 180 mm — 180 mm — 180 mm

CME Series - Technical specification

	CME 4	CME 8	CME 16	CME 32
Hole size	6.5 mm with 20 mm spacings			
Weight	0.1 kg	0.15 kg	0.3 kg	0.6 kg
Dimensions	See diagram opposite			

Protector accessories
Accessories

ESP Remote display unit
Use with: ESP M1R, M2R and M4R

Part No.	Description
ESP RDU/415M1R	Remote LED display for 3 phase 415 V M1R protector
ESP RDU/415M2R	Remote LED display for 3 phase 415 V M2R protector
ESP RDU/415M4R	Remote LED display for 3 phase 415 V M4R protector
ESP RDU/480M1R	Remote LED display for 3 phase 480 V M1R protector
ESP RDU/480M2R	Remote LED display for 3 phase 480 V M2R protector
ESP RDU/480M4R	Remote LED display for 3 phase 480 V M4R protector
ESP RDU-SEAL	IP64 rated seal for remote displays

ESP Remote display unit
Use with: ESP D1R variants

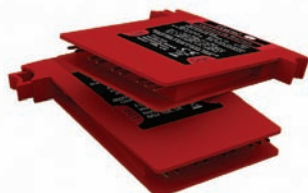| Part No.	Description
ESP RDU D1R/208	Remote LED display for 3 phase 208 V D1R protector
ESP RDU D1R/415	Remote LED display for 3 phase 415 V D1R protector
ESP RDU D1R/480	Remote LED display for 3 phase 480 V D1R protector
ESP RDU D1R/LCD/208	Remote LCD display for 3 phase 208 V D1R protector
ESP RDU D1R/LCD/415	Remote LCD display for 3 phase 415 V D1R protector
ESP RDU D1R/LCD/480	Remote LCD display for 3 phase 480 V D1R protector

Cable assembly
Use to: Connect display units to suitable three phase protectors

Part No.	Description	Length
ESP RLA-1	Cable assembly for connecting ESP Remote Display Unit to ESP M1R, M2R and M4R series	1 m
ESP RLA-2	Cable assembly for connecting ESP Remote Display Unit to ESP M1R, M2R and M4R series	2 m
ESP RLA-4	Cable assembly for connecting ESP Remote Display Unit to ESP M1R, M2R and M4R series	4 m
ESP RLA HD-1	Cable assembly for connecting display unit to three phase ESP XXX D1R or ESP XXX D1R/LCD protectors	1 m
ESP RLA HD-2	Cable assembly for connecting display unit to three phase ESP XXX D1R or ESP XXX D1R/LCD protectors	2 m
ESP RLA HD-4	Cable assembly for connecting display unit to three phase ESP XXX D1R or ESP XXX D1R/LCD protectors	4 m

Cable assembly
Use with: ESP ISDN/RJ45-4/8 or ESP ISDN/RJ45-8/8 plug-in ISDN protectors

Part No.	Description	Length
ESP CAT5e/UTP-1	Cable assembly for ESP Cat-5e with unshielded RJ45 connections	1 m
ESP CAT6/STP-1	Cable assembly for ESP Cat-6 with shielded RJ45 connections	1 m

Cable assembly with RJ45 connections for the ESP ISDN/RJ45-4/8 or ESP ISDN/RJ45-8/8 plug-in ISDN protectors for use if the standard 0.5 m cable is insufficient

Protector accessories
Accessories

Slim Line replacement base/module

Slim Line replacement base/module

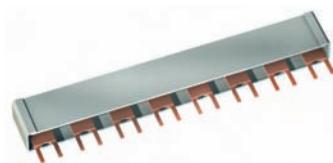**Replacement:** Base & module for the Slim Line Series of protectors

Part No.	Description
Slim Line protector replacement base	
ESP SL/B	For use with standard and 4-20 mA Slim Line Series
ESP SL/I/B	Isolated screen version for use with standard and 4-20 mA Slim Line Series
ESP SLX/B	For use with Slim Line Intrinsically Safe (ATEX) Series
ESP SLX/I/B	Isolated screen version for use with Slim Line Intrinsically Safe (ATEX) Series
ESP SL/3W/B	For use with Slim Line 3-wire Series
ESP SLRTD/B	For use with Slim Line RTD Series
ESP SL RS485/B	For use with Slim Line RS485 Series
Slim Line protector replacement module	
ESP SLXX/M	For use with Slim Line Series - replace 'XX' with relevant voltage, i.e. 06, 15, 30, 50, 110
ESP SLTN/M	For use with Slim Line TN Series
ESP SL15X/M	For use with Slim Line Instrinsically Safe (ATEX) Series, 15 V
ESP SL30X/M	For use with Slim Line Instrinsically Safe (ATEX) Series, 30 V
ESP SLRTD/M	For use with Slim Line RTD Series
ESP SLRS485/M	For use with Slim Line RS485 Series
Slim Line LED protector replacement module	
ESP SLXXL/M	For use with Slim Line LED Series - replace 'XX' with relevant voltage, i.e. 06, 15, 30, 50, 110
ESP SL30L/4-20/M	For use with Slim Line LED Series, 4-20 mA
ESP SL15XL/M	For use with Slim Line Instrinsically Safe (ATEX) LED Series, 15 V
ESP SL30XL/M	For use with Slim Line Instrinsically Safe (ATEX) LED Series, 30 V
ESP SLXX/3W/M	For use with Slim Line 3-wire LED Series – replace 'XX' with relevant voltage, i.e. 06, 15, 30, 50, 110

Connecting and earthing bar

Connecting and earthing bar

Use with: ESP WT protectors

Part No.	Description
ESP CE7	For use with 3 x ESP 690/12.5/WT for TN-C supplies
ESP CE9	For use with 3 x ESP 690/25/WT for TN-C supplies
ESP CE10	For use with 4 x ESP 690/12.5/WT for TN-S supplies
ESP CE13	For use with 4 x ESP 690/25/WT for TN-S supplies

ESP PTE002

ESP PTE002

Use to: Test the ESP SSI/M protector

Part No.	Description
ESP PTE002	SSI Portable Tester

ESP PTE002 has Network Rail Approval PA05/02216. NRS PADS reference 094/020033 Annual calibration is required, which is processed as ESP PTE002/CAL

ESP RF mounting plates

ESP RF mounting plates

Use with: Any ESP RF protector to assist installation

Part No.	Description
ESP SL/B	Straight Mounting plate
ESP RF BK2	90º Mounting plate
ESP RF BK3	Bulkhead through mounting plate (single)
ESP RF BK4	Bulkhead through mounting plate (4 protectors)

ESP RF GDT-x

ESP RF GDT-x

Replacement: Gas Discharge Tubes for use with standard RF protectors

Part No.	Description	Voltage
ESP SL/B	Gas Discharge Tube	90 V
ESP RF GDT-2	Gas Discharge Tube	150 V
ESP RF GDT-3	Gas Discharge Tube	230 V
ESP RF GDT-4	Gas Discharge Tube	350 V
ESP RF GDT-5	Gas Discharge Tube	470 V
ESP RF GDT-6	Gas Discharge Tube	600 V

Part No.	Description	GDT Voltage
ESP RF GDT-A	Gas Discharge Tube	600 V

Replacement Gas Discharge Tube for use with the ESP RF 111A11, ESP RF AA1A11 and ESP RF 441A11 protectors