CERTIFIED COMPANY

AIDITEC SYSTEMS

INNOVATIVE TECHNOLOGIES IN LIGHTNING PROTECTION

Why Aiditec?

For at least a dozen reasons:

- Because our products are safe and effective.
- Because we offer solutions tailored to the needs and demands of our customers.
- Because we are innovating by incorporating new technologies in Lightning Protection Systems.
- Because we adapt to the requirements of our customers.
- Because we have a high knowledge of Lightning Protection Systems.
- Because we provide high quality care, professional, close and personalized.
- Because our products and services have an excellent price / quality ratio.
- Because we are rigorous in meeting our commitments.
- Because we have highly qualified scientific personnel.
- Because we are highly respectful of the environment.
- Because we believe in human values.
- Because you will feel confident with our products.

Our product lines are:

Lightning Rod ΔDVANCE ESE

AIDITEC SYSTEMS

Lightning Rod ΔDVANCE ESE

Tests according PRODUCT CERTIFICATION Regulations for ESE Lightning Rod

Protection Guarantee

The lightning rod ΔDVANCE ESE has successfully passed the tests based on the UNE 21186, NFC 17102 and NP 4426, for Early Streamer Emission lightning rod.

TESTS

* **DIMENSIONAL**
  Ensures that the dimensions are standardized.
* **SALINE MIST AND HUMID SULPHUROUS ATMOSPHERE**
  Certifies resistance in corrosive environments.
* **IMPULSE WITHSTAND CURRENT (100 kA - 10/350 µs)**
  Ensures its functioning after several lightning strokes.
* **ADVANCE TIME**
  Guarantees the protection radii.

Security Factor

Radii protection calculated based on the CTE, UNE 21186, NFC 17102 and NP 4426 standards, applying a minimum Security Factor of 10 microseconds.

Incorporation of New Technologies

As a result of investigations made and the R + D projects, the lightning rod ΔDVANCE ESE incorporates the following new technologies:

- **SAT - STABILIZATION OF AVANCE TIME**
  It achieves a maximum deviation of 5% in the advance time performed according to Product Certification Regulations, which guarantees the stability of the lightning rod.
- **FBD - FORCED BLOW DEIONIZATION**
  Allows quick deionization arc chamber, which ensures that the lightning rod is in perfect condition to capture a new discharge.
- **IAW - INSULATION ASSURANCE WATER**
  Maintains permanently isolated the electrodes of the lightning rod wich have to be at a different potential; ensuring lightning rod operation in extreme wet conditions.
- **EOA - EXTENSION OF ARC**
  Maintains proper tension between the electrodes of the lightning rod that are at different potential, ensuring its perfect running.

RADII PROTECTION CHART

Protection Level	h	ΔDVANCE RP-40	ΔDVANCE RP-50	ΔDVANCE RP-60	ΔDVANCE RP-80
Level 4 D= 60mt	2	32	36	40	44
	4	62	72	80	85
	6	80	90	100	107
	8	82	91	101	108
Level 3 D=45 mt	2	25	32	38	39
	4	50	60	70	78
	6	70	80	90	97
	8	71	82	91	98
Level 2 D=30 mt	2	20	25	28	34
	4	42	50	60	68
	6	55	65	75	87
	8	56	66	76	87
Level 1 D=20 mt	2	18	20	26	32
	4	34	40	46	63
	6	40	50	65	80
	8	40	52	66	80

Protection Radii in meters according: CTE SU8, UNE 21186, NFC 17102 and NP 4426.

h = height of the lightning rod relative to the plane to be protected.

Operating in Rainy Conditions

TOTAL ISOLATION GUARANTEE

In the early streamer emission lightning rod is essential to ensure the insulation between the plates or electrodes that form and are at different potentials.

If adverse weather conditions (heavy rain) this isolation is lost, the triggering devicewould stop working and therefore can not provide lightning rod protection specified.

The ΔDVANCE ESE lightning rod ensures operation of triggering device and its effectiveness in protecting thanks to the insulating sleeves "Isolated Rain", which ensures complete isolation between the electrodes in heavy rain conditions.

The system "Isolated Rain" ensures total isolation in extreme wet conditions, provided by the insulating sleeves that surround the electrodes must permanently maintain the insulation, which prevents rain electrical contact between the metal body of the lightning rod (at potential atmospheric) with the metal shaft (at ground potential).

The isolating system "ISOLATED RAIN" guaranteed the perfect operation under extreme rain:

- WHEN THE ELECTRIC FIELD VARIES DURING STORM.
- DURING THE APPROACH OF THE DOWNWARD LEADER..

Verification

Installation

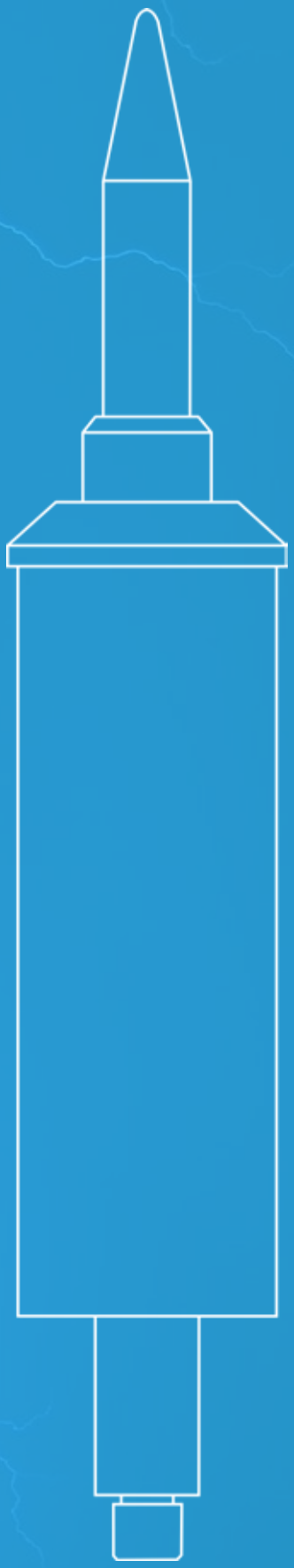
The ΔDVANCE ESE lightning rod installation must be performed as described in the Technical Building Code (CTE) and the UNE 21186, NFC 17102 and NP 4426.

LIGHTNING ROD ΔDVANCE ESE

					Protección Level				
Reference		Model	Material	Dimensions	4	3	2	1	RRP (€)
900 011		ΔDVANCE RP - 40	Stainless steel	Ø 90 x 500 mm	80	70	55	40	1.045,00
900 012		ΔDVANCE RP - 50	Stainless steel	Ø 90 x 500 mm	90	80	65	50	1.175,00
900 013		ΔDVANCE RP - 60	Stainless steel	Ø 90 x 500 mm	100	90	75	65	1.350,00
900 014		ΔDVANCE RP - 80	Stainless steel	Ø 90 x 500 mm	107	97	87	80	1.600,00
					Radii Protection - mts				

Radii protection for 6mt height of the lightning rod in relation to the plane to be protected, and based on: CTE SU8, UNE 21186, NFC 17102 and NP 4426.

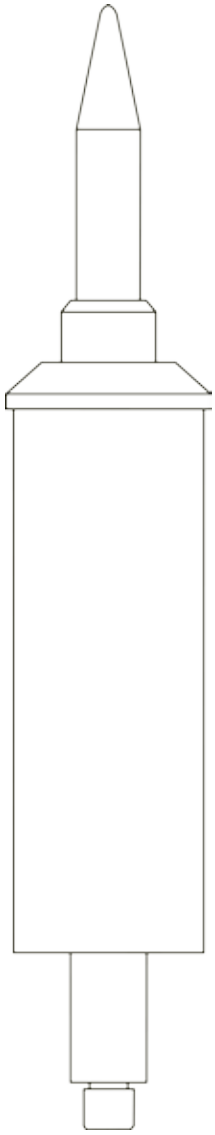
Lightning Rod Sigma ESE



AIDITEC SYSTEMS

Lightning Rod Sigma ESE

ESE lightning rod made of stainless steel AISI 316 and tests based on the UNE 21186, NFC 17102 and NP 4426.



Technical Specifications:

- Double triggering device:
  - Generator anticipation of the upward leader.
  - Circuit for storing electrical charges.
- Operation in any weather condition.
- Guarantee isolation between electrodes.
- Fully autonomous and maintenance-free.
- Testable in situ with our AS Tester device.

Tests and Certificates:

Tests performed at the Technological Institute of Energy (ITE) and based on the UNE 21186, NFC 17102 and NP 4426.

- Mechanical.
- Environmental.
- Electrical.
- Advance Time.

Benefits and Guarantees:

- Security Factor of 5 µs as minimun in the radii protection.
- Efficiency at 100% discharge.
- High level of protection.
- Electrical continuity.
- No resistance to the passage of the discharge.
- Maintains its properties to the passage of each download.
- Long-term guarantee.
- Isolation guarantee between electrodes.

Standards and Installation:

- According to the requirements of the following standards:
  UNE 21186 - UNE EN 62305 - NFC 17102 - NP 4426 - CTE - REBT
- For installation is recommended to follow the guidelines in these standards.

LIGHTNING ROD Sigma ESE

Reference		Model	LEVEL 1		LEVEL 2		LEVEL 3		LEVEL 4		RRP (€)
			Rp1	Rp2	Rp1	Rp2	Rp1	Rp2	Rp1	Rp2	
800 005		Sigma R - 25	40	45	50	55	55	70	65	85	650,00
800 001		Sigma R - 40	50	55	55	65	65	80	75	95	850,00
800 002		Sigma R - 55	55	65	65	75	75	90	85	105	1.000,00
800 003		Sigma R - 65	65	75	75	85	85	100	95	115	1.100,00
800 004		Sigma R - 75	80	80	87	90	97	105	107	120	1.250,00

Rp 1 __ Radii protection in meters according UNE 21186, NFC 17102 and NP 4426.

Rp 2 __ ONLY FOR SPAIN. Radii protection in meters according CTE.

Radii protection for 6mt height of the lightning rod in relation to the plane to be protected.

PASSIVE LIGHTNING RODS

AIDITEC SYSTEMS

Franklin rods

Includes adapting piece of brass for mast Ø 45 mm for inner connection with round conductor Ø 8/10 mm (50/70 mm ^{2}).

Reference	Model	Material	Dimensions (mm)	RRP (€)
700 000	Franklin rods multiple	Stainless steel	1 x (Ø 16 X 170) + 3 x (Ø 8 X 65)	160,00
700 001	Franklin rods multiple	Copper	1 x (Ø 16 X 170) + 3 x (Ø 8 X 65)	155,00
700 020	Franklin rods single	Stainless steel	Ø 16 X 170	140,00
700 021	Franklin rods single	Copper	Ø 16 X 170	120,00

Meets with CTE, IEC 62305 and EN 50164.

With adapting piece made of brass/aluminum and stainless steel flange for outside connection with masts until Ø 55mm with round conductor up Ø15mm and flat conductor up to 50 x 5mm.

Reference	Model	Material	Dimensions (mm)	RRP (€)
700 010	Franklin rods multiple	Stainless steel	1 x (Ø 16 X 170) + 3 x (Ø 8 X 65)	150,00
700 011	Franklin rods multiple	Copper	1 x (Ø 16 X 170) + 3 x (Ø 8 X 65)	155,00
700 030	Franklin rods single	Stainless steel	Ø 16 X 170	125,00
700 031	Franklin rods single	Copper	Ø 16 X 170	120,00

Meshed conductors
Copper termination rods

Reference	Material	Dimensions	Thread type	RRP (€)
500 600	Copper	Ø 10 x 500 mm	External M-10	60,00
500 601	Copper	Ø 10 x 1000 mm	External M-10	75,00
500 602	Copper	Ø 16 x 500 mm	External M-16	80,00
500 603	Copper	Ø 16 x 1000 mm	External M-16	165,00
500 604	Copper	Ø 16 x 2000 mm	External M-16	206,00
500 605	Copper	Ø 20 x 500 mm	External M-16	125,00
500 606	Copper	Ø 20 x 500 mm	Internal M-10	125,00
500 607	Copper	Ø 20 x 1000 mm	Internal M-10	350,00

Meets with IEC 62305 and EN 50164.

Aluminiun termination rods

Reference	Material	Dimensions	Thread type	RRP (€)
500 630	Aluminium	Ø 10 x 500 mm	External M-10	47,00
500 631	Aluminium	Ø 10 x 1000 mm	External M-10	62,00
500 632	Aluminium	Ø 16 x 500 mm	External M-16	51,00
500 633	Aluminium	Ø 16 x 1000 mm	External M-16	61,00
500 634	Aluminium	Ø 16 x 2000 mm	External M-16	81,00
500 635	Aluminium	Ø 16 x 3000 mm	External M-16	101,00

Meets with IEC 62305 and EN 50164.

Stainless steel termination rods

Reference	Material	Dimensions	Thread type	RRP (€)
500 680	Stainless steel	Ø 16 x 500 mm	External M-16	55,00
500 681	Stainless steel	Ø 16 x 1000 mm	External M-16	70,00
500 682	Stainless steel	Ø 16 x 2000 mm	External M-16	108,00
500 683	Stainless steel	Ø 20 x 500 mm	External M-16	75,00
500 684	Stainless steel	Ø 20 x 500 mm	Internal M-10	70,00
500 685	Stainless steel	Ø 20 x 1000 mm	Internal M-10	210,00

Meets with IEC 62305 and EN 50164.

Galvanized steel termination rods

Reference	Material	Dimensions	Thread type	RRP (€)
500 690	Galvanized steel	Ø 16 x 1000 mm	External M-16	40,00
500 691	Galvanized steel	Ø 16 x 2000 mm	External M-16	56,00

Meets with IEC 62305 and EN 50164.

Meshed conductors
Supports for termination rods

Supports for fixing termination rods.

Reference	Material	Dimensions	Fixing type	RRP (€)
500 700	Galvanized steel	70 x 70 x 70mm	External thread M-10	19,00
500 720	Concrete	Ø 337 x 90 mm	Internal thread M-16	27,00
500 721	Concrete	Ø 240 x 90 mm	Internal thread	19,00
500 740	Support - St St. Termination Rod - Al	Ø 10 x 1000 mm	For ridge tile Adjustable120/240mm	30,00

Meets with EN 50164, UNE 21186, NFC 17102 and NP 4426.

Accessories for concrete supports

Roof protection plate when using concrete supports.

Reference	Material	Dimensions	RRP (€)
500 730	Copolimero ethylene and vinyl acetate (EVA)	Ø 370 x 10 mm	8,50
500 731	Copolimero ethylene and vinyl acetate (EVA)	Ø 280 x 10 mm	6,50

Self-supporting air termination rods

Self-supported aluminum termination rods with hinged tripod made in galvanized steel and adjustability up to 10° inclination. Dimensioned to withstand winds up to 145km/ h. Includes concrete weights, roof protection plates and clamp for connection with round conductor Ø 6/10 mm.

Reference	Material	height	Space required	Nr coun-terweights	RRP (€)
500 760	Galvanized Steel and aluminum. Strapless	4,5 mt	1,180x1,320mt	3	910,00
500 761	Galvanized Steel and aluminum. Strapless	5,5 mt	1,180x1,320mt	6	1.050,00
500 762	Galvanized Steel and aluminum. With straps	6,5 mt	2,490x2,830mt	6	1.740,00
500 763	Galvanized Steel and aluminum. With straps	7,5 mt	1,180x1,320mt	6	1.810,00
500 764	Galvanized Steel and aluminum. With strapss	8,5 mt	1,180x1,320mt	9	1.980,00

Meets with EN 50164, UNE 21186, NFC 17102 and NP 4426.

Accesories for self-supporting air termination

Supports for fixing self-supporting air termination rods.

Reference	Denomination	Material	Dimensions	RRP (€)
500 780	Counterweight	Concrete	Ø 337 x 90 mm	26,00
500 730	Roof protection plate	EVA	Ø 370 x 10 mm	8,50

ACCESSORIES

AIDITEC SYSTEMS

Adapting pieces

For connecting the lightning rod with the mast and with internal connection for down conductor.

Reference	Material	Mast	Conductors	RRP (€)
700 100	Brass	Ø 45mm	Round Ø 8/10mm	55,00
700 101	Brass	Ø 45mm	Flat 30 x 2mm	65,00
700 120	Stainless steel	Ø 45mm	Round Ø 8/10mm	100,00
700 121	Stainless steel	Ø 45mm	Flat 30 x 2mm	120,00

Meets with EN 50164, UNE 21186, NFC 17102 and NP 4426.

For other materials, masts and conductors consult price

For connecting the lightning rod with the mast and with stainless steel flange for external connection with down conductor

Reference	Material	Mast	Driver	RRP (€)
700 130	Stainless steel	Up to Ø 55mm	Round up to Ø 15mm Flat to 50 x 5mm	95,00
700 132	Aluminum	Up to Ø 55mm	Round up to Ø 15mm Flat to 50 x 5mm	65,00

Masts for wall

To be fixed to buildings or structures.

Reference	Material	Length	Nr. sections / Length	RRP (€)
700 200	Zinc plated steel	3mts	1 section/3mts	65,00
700 201	Zinc plated steel	4mts	2 sections/2mts	85,00
700 202	Zinc plated steel	6mts	2 sections/3mts	135,00
700 203	Zinc plated steel	6mts	3 sections/2mts	147,00
700 204	Zinc plated steel	8mts	3 sections/3mts	350,00
700 205	Zinc plated steel	8mts	4 sections/2mts	372,00
700 230	Galvanized steel	3mts	1 section/3mts	100,00
700 231	Galvanized steel	4mts	2 sections/2mts	125,00
700 232	Galvanized steel	6mts	2 sections/3mts	180,00
700 233	Galvanized steel	6mts	3 sections/2mts	195,00
700 234	Galvanized steel	8mts	3 sections/3mts	590,00
700 235	Galvanized steel	8mts	4 sections/2mts	620,00
700 270	Stainless steel	3mts	1 section/3mts	250,00
700 271	Stainless steel	4mts	2 sections/2mts	350,00
700 272	Stainless steel	6mts	2 sections/3mts	550,00
700 273	Stainless steel	6mts	3 sections/2mts	560,00
700 274	Stainless steel	8mts	3 sections/3mts	1.000,00
700 275	Stainless steel	8mts	4 tramos/2mts	1.050,00

Meets with UNE 21186, NFC 17102 and NP 4426.

Fixation with 3 suuports, except for 8mts masts wich must to be fixed with 5 supports.
The minimum distance between supports should be 30 cm.
Use stainless steel masts in highly corrosive environments.

Free standing masts

Made from galvanized steel and studied to withstand winds up to 140 km / hour.

Reference	Length	Nº sections	Hinge	Assembly	Solid base dimensions	Foundation dimensions	RRP (€)
700 306	6 mt	2	Yes	Screwed	400 x 400 x 10 mm	0,8 x 0,8 x 0,8 mt	900,00
700 308	8 mt	3	Yes	Screwed	400 x 400 x 10 mm	0,8 x 0,8 x 0,8 mt	1.350,00
700 310	10 mt	4	Yes	Screwed	500 x 500 x 10 mm	1,0 x 1,0 x 1,0 mt	1.700,00
700 312	12 mt	5	Yes	Screwed	500 x 500 x 10 mm	1,0 x 1,0 x 1,0 mt	2.300,00
700 315	15 mt	6	Yes	Screwed	500 x 500 x 10 mm	1,5 x 1,5 x 1,5 mt	3.100,00
700 320	20 mt	8	No	Welded	600 x 600 x 10 mm	2,0 x 2,0 x 2,0 mt	5.900,00
700 325	25 mt	10	No	Welded	750 x 750 x 12 mm	2,0 x 2,0 x 2,0 mt	9.550,00

Meets with UNE 21186, NFC 17102 and NP 4426.

To install over concrete foundation embedded in the ground.

Anchorages

Anchorages for flat roofs, for mast Ø 45mm.

Reference	Material	Solid base dimensions	For mast up	RRP (€)
700 400	Galvanized steel	300 x 300 mm	3 mt	250,00
700 401	Galvanized steel	500 x 500 mm	6 mt	290,00
700 600	Zinc plated steel	300 x 300 mm	3 mt	160,00
700 601	Zinc plated steel	500 x 500 mm	6 mt	200,00

Meets with UNE 21186, NFC 17102 and NP 4426.

We recommend to built a concrete foundation of 200mm high and at least 200mm bigger than the size of the metalic plate base.

Standard anchorage to be embedded or screwed into the wall. Manufactured in "U" shaped profile of 20 x 40 x 20 x 3 mm.

Reference	Material	Length	Fixing type	Quantity	RRP (€)
700 420	Galvanized steel	35 cm	For embedded	1 Support	25,00
700 421	Galvanized steel	50 cm	For embedded	1 Support	40,00
700 422	Galvanized steel	35 cm	For screwed	1 Support	27,00
700 423	Galvanized steel	50 cm	For screwed	1 Support	40,00
700 620	Zinc plated steel	35 cm	For embedded	1 Support	15,00
700 621	Zinc plated steel	50 cm	For embedded	1 Support	25,00
700 622	Zinc plated steel	35 cm	For screwed	1 Support	19,00
700 623	Zinc plated steel	50 cm	For screwed	1 Support	25,00

Meets with UNE 21186, NFC 17102 and NP 4426.

Anchorages

Light anchorage to be embedded into the wall. Manufactured in "L" shaped profile of 30 x 30 x 3 mm.

Reference	Material	Length	Quantity	RRP (€)
700 440	Galvanized steel	35 cm	1 Support	20,00
700 441	Galvanized steel	50 cm	1 Support	22,00
700 640	Zinc plated steel	35 cm	1 Support	12,00
700 641	Zinc plated steel	50 cm	1 Support	14,00

Meets with UNE 21186, NFC 17102 and NP 4426.

Anchorages for parallel fixing, "+" and "H".

Reference	Material	Length	Fixing type	Quantity	RRP (€)
700 460	Galvanized steel	20 cm	In parallel	1 Support	45,00
700 480	Galvanized steel	20 cm	In " H "	1 Support	40,00
700 481	Galvanized steel	20 cm	In " + "	1 Support	40,00
700 660	Zinc plated steel	20 cm	In parallel	1 Support	25,00
700 680	Zinc plated steel	20 cm	In " H "	1 Support	25,00
700 681	Zinc plated steel	20 cm	In " + "	1 Support	25,00

Meets with UNE 21186, NFC 17102 and NP 4426.

Anchorage to weld to structures. Manufactured in profile "U" of 20 x 40 x 20 x 3 mm.

Reference	Material	Length	Quantity	RRP (€)
700 500	Galvanized steel	35 cm	1 Support	16,00
700 501	Galvanized steel	50 cm	1 Support	22,00
700 502	Galvanized steel	75 cm	1 Support	33,00
700 700	Zinc plated steel	35 cm	1 Support	12,00
700 701	Zinc plated steel	50 cm	1 Support	15,00
700 702	Zinc plated steel	75 cm	1 Support	25,00

Meets with UNE 21186, NFC 17102 and NP 4426.

Regulable anchorage manufactured in profile "U" of 20 x 40 x 20 x 3 mm, to be fixed with screws.

Reference	Material	Regulation	Quantity	RRP (€)
700 540	Galvanized steel	From 50 to 80 cm	1 Support	200,00
700 740	Zinc plated steel	From 50 to 80 cm	1 Support	150,00

Meets with UNE 21186, NFC 17102 and NP 4426.

Anchorages

Anchorages for fixing masts to trestle towers. Manufactured in profile "U" of 20 x 40 x 20 x 3 mm.

Reference	Material	Length	For trestle towers.	Quantity	RRP (€)
700 560	Galvanized steel	42 cm	Model 180	1 Support	55,00
700 561	Galvanized steel	49 cm	Model 250	1 Support	59,00
700 562	Galvanized steel	60 cm	Model 360	1 Support	66,00
700 760	Zinc plated steel	42 cm	Model 180	1 Support	25,00
700 761	Zinc plated steel	49 cm	Model 250	1 Support	28,00
700 762	Zinc plated steel	60 cm	Model 360	1 Support	36,00

Meets with UNE 21186, NFC 17102 and NP 4426.

Flange for different types of anchorages. Manufactured of reinforced profile of 30 x 3 mm.

Reference	Material	For mast	Quantity	RRP (€)
700 580	Galvanized steel	Up to Ø 50 mm	1 flange	7,00
700 780	Zinc plated steel	Up to Ø 50 mm	1 flange	3,50

Meets with UNE 21186, NFC 17102 and NP 4426.

Conductors

Bare flat conductors: Recommended by lightning protection systems standards for down-conductors and earthing.

Reference	Material	Dimensions	Weight	RRP (€)
600 100	Electrolytic copper	20 x 2,5 mm	0,45 kg/mt	Acc/Market
600 101	Electrolytic copper	30 x 2 mm	0,50 kg/mt	Acc/Market
600 120	Tinned Copper	20 x 2,5 mm	0,45 kg/mt	Acc/Market
600 121	Tinned Copper	30 x 2 mm	0,50 kg/mt	Acc/Market
600 140	Aluminium	30 x 3 mm	0,27 kg/mt	Acc/Market
600 160	Galvanized steel	20 x 2,5 mm	0,40 kg/mt	Acc/Market
600 161	Galvanized steel	30 x 3,5 mm	0,84 kg/mt	Acc/Market
600 180	Stainless steel	30 x 3,5 mm	0,84 kg/mt	Acc/Market
600 181	Stainless steel	30 x 2 mm	0,50 kg/mt	Acc/Market

Meets with IEC 62305, EN 50164, EN 13601, BS 7430, UNE 21186, NFC 17102, NP 4426, AS 1567, BS 6746, BS 2898, BS 6360 and AS 1866.

Conductors

Bare solid round conductors: Recommended by lightning protection systems standards for use in highly corrosive environments.

Reference	Material	Dimensions	Weight	RRP (€)
600 200	Electrolytic copper	Ø 8 mm	0,45 kg/mt	Acc / Market
600 240	Aluminium	Ø 8 mm	0,14 kg/mt	Acc / Market
600 242	Aluminium	Ø 10 mm	0,15 kg/mt	Acc / Market
600 260	Galvanized steel	Ø 8 mm	0,40 kg/mt	Acc / Market
600 261	Galvanized steel	Ø 10 mm	0,62 kg/mt	Acc / Market
600 280	Stainless steel	Ø 8 mm	0,40 kg/mt	Acc / Market
600 281	Stainless steel	Ø 10 mm	0,60 kg/mt	Acc / Market

Meets with IEC 62305, EN 50164, EN 13601, BS 7430, BS 2898, UNE 21186, NFC 17102, NP 4426, AS 1567 and AS 1866.

Stranded bare conductors: Recommended by lightning protection systems standards for its easy installation.

Reference	Material	Dimensions	Composition	Weight	RRP (€)
600 300	Electrolytic copper	35 mm²	7 strands of Ø 2,5 mm	0,40kg/mt	Acc / Market
600 301	Electrolytic copper	50 mm²	19 strands of Ø 1,8 mm	0,47kg/mt	Acc / Market
600 302	Electrolytic copper	70 mm²	19 strands of Ø 2,2 mm	0,65kg/mt	Acc / Market
600 303	Electrolytic copper	95 mm²	19 strands of Ø 2,5 mm	0,85kg/mt	Acc / Market
600 304	Electrolytic copper	120 mm²	37 strands of Ø 2 mm	1,10kg/mt	Acc / Market

Meets with IEC 62305, EN 50164, BS 6360, UNE 21186, NFC 17102 and NP 4426.

Fixings for flat conductors

Clips for fixing flat conductors over buildings and structures.

Reference	Material	For conductor	Conductor elevation	Includes	RRP (€)
600 410	Copper	Up to 30 mm wide	10 mm	Plug and screw	23,00
600 411	Copper	Up to 30 mm wide	60 mm with extension	Plug and screw	38,00
600 412	Copper	Up to 30 mm wide	110 mm with extension	Plug and screw	45,00
600 430	Galvanized steel	Up to 30 mm wide	10 mm	Plug and screw	6,00
600 431	Galvanized steel	Up to 30 mm wide	60 mm with extension	Plug and screw	28,00
600 432	Galvanized steel	Up to 30 mm wide	110 mm with extension	Plug and screw	39,00
600 460	Stainless steel	Up to 30 mm wide	10 mm	Plug and screw	9,00
600 461	Stainless steel	Up to 30 mm wide	60 mm with extension	Plug and screw	28,00
600 462	Stainless steel	Up to 30 mm wide	110 mm with extension	Plug and screw	38,00
600 481	Nylon	Up to 30 mm wide	25 mm	Plug and screw	4,80
600 482	Nylon	Up to 30 mm wide	40 mm	Plug and screw	5,00
600 450	Stainless steel	30 x 2 mm	Without elevation	Plug and screw	3,00
600 480	Plastic	30 x 2 mm	10 mm	Plug and screw	2,60

Meets with UNE 21186, NFC 17102 and NP 4426.

Fixings for round conductors

Clips for fixing round conductors over buildings and structures.

Reference	Material	For conductor	Conductor elevation	Includes	RRP (€)
600 500	Copper	Ø 8 mm	Without elevation	Plug and screw	2,30
600 501	Copper	Ø 10 mm	Without elevation	Plug and screw	3,00
600 510	Copper	Ø 7 to Ø 10 mm	10 mm	Plug and screw	5,20
600 511	Copper	Ø 7 to Ø 10 mm	60 mm with extension	Plug and screw	21,00
600 512	Copper	Ø 7 to Ø 10 mm	110 mm with extension	Plug and screw	27,00
600 540	Galvanized steel	Ø 7 to Ø 10 mm	10 mm	Plug and screw	4,20
600 541	Galvanized steel	Ø 7 to Ø 10 mm	60 mm with extension	Plug and screw	25,00
600 542	Galvanized steel	Ø 7 to Ø 10 mm	110 mm with extension	Plug and screw	35,00
600 560	Stainless steel	Ø 7 to Ø 10 mm	10 mm	Plug and screw	4,20
600 561	Stainless steel	Ø 7 to Ø 10 mm	60 mm with extension	Plug and screw	25,00
600 562	Stainless steel	Ø 7 to Ø 10 mm	110 mm with extension	Plug and screw	35,00
600 580	Nylon	Ø 8 mm	25 mm	Plug and screw	2,20
600 581	Nylon	Ø 8 mm	40 mm	Plug and screw	2,40

Meets with UNE 21186, NFC 17102 and NP 4426.

Extensions.

Reference	Material	For conductor	Tipe	RRP (€)
600 680	Stainless steel	Fixing not included	Extension Ø 25 and 50 mm length	21,00
600 681	Stainless steel	Fixing not included	Extension Ø 25 and100 mm length	32,00
600 690	Brass	Fixing not included	Extension Ø 25 and 50 mm length	17,00
600 691	Brass	Fixing not included	Extension Ø 25 and 100 mm length	23,50

Meets with EN 50164, UNE 21186, NFC 17102 and NP 4426.

Supports for fixing conductors

Supports for fixing conductors to flat surfaces.

Reference	Material	For conductor	RRP (€)
600 600	Polypropylene	Ø 7 to Ø 10 mm and flat up to 30 mm	8,50
600 601	Polypropylene	Ø 8 mm	3,30
600 620	Concrete	Ø 8 mm	3,90

Meets with UNE 21186, NFC 17102 and NP 4426.

Supports for fixing conductors to tiles.

Reference	Material	For conductor	Tipe	RRP (€)
600 640	Stainless steel	Ø 6 to Ø 11 mm	Regulable 170 / 240 mm	12,50
600 641	Stainless steel	Ø 8 mm	Extensible 170 / 280 mm	12,50
600 642	Stainless steel	Ø 6 to Ø 10 mm	Regulable 120 / 240 mm. For ridge	13,90
600 643	Copper	Ø 6 to Ø 10 mm	Regulable 120 / 240 mm. For ridge	21,00
600 660	Stainless steel	Ø 8 mm	By pressure. For thickness 8/10mm	7,00
600 661	Stainless steel	Ø 8 mm	By pressure. For thickness15/20mm	8,00
600 670	Stainless steel	Ø 6 to Ø 10 mm	For roofs type sandwich	8,00
600 700	Stainless steel	Fixing not included	For downpipe Ø 60 to Ø 150 mm	6,60
600 720	Galvanized steel	Fixing not included	For downpipe Ø 60 to Ø 150 mm	5,00
600 740	Copper	Fixing not included	For downpipe Ø 60 to Ø 150 mm	11,00

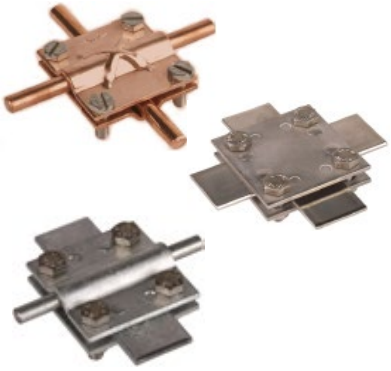
Meets with EN 50164, UNE 21186, NFC 17102 and NP 4426.

Clamps

Universal clamp for round conductors.

Referencia	Material	For conductor	RRP (€)
600 800	Copper	Ø 8 mm	8,70
600 820	Stainless steel	Ø 8 to Ø 10 mm	7,90
600 840	Galvanized steel	Ø 8 to Ø 10 mm	3,50
600 860	Aluminium	Ø 8 to Ø 10 mm	5,00

Meets with IEC 62305, EN 50164, UNE 21186, NFC 17102 and NP 4426.



Square clamp for flat and round conductors.

Referencie	Material	For conductor	RRP (€)
600 802	Copper	Flat up to 30 mm	12,70
600 803	Copper	Ø 8 to Ø 10 mm and flat up to 30 mm	32,00
600 822	Stainless steel	Flat up to 30 mm	17,30
600 823	Stainless steel	Ø 8 to Ø 10 mm and flat up to 30 mm	21,50
600 841	Galvanized steel	Flat up to 30 mm	7,40
600 842	Galvanized steel	Ø 8 to Ø 10 mm and flat up to 30 mm	9,40

Meets with IEC 62305, EN 50164, UNE 21186, NFC 17102 and NP 4426.

T shape clamp for round conductor.

Referencie	Material	For conductor	RRP (€)
600 806	Copper	Ø 8 to Ø 10 mm	9,00
600 845	Galvanized steel	Ø 8 to Ø 10 mm	5,90

Meets with IEC 62305, EN 50164, UNE 21186, NFC 17102 and NP 4426.

Straight clamp for round conductor

Referencie	Material	For conductor	RRP (€)
600 804	Copper	Up to Ø 10 mm	9,20
600 843	Galvanized steel	Up to Ø 10 mm	5,00
600 824	Stainless steel	Up to Ø 10 mm	12,50

Meets with IEC 62305, EN 50164, UNE 21186, NFC 17102 and NP 4426.

Parallel clamp for round conductor.

Referencie	Material	For conductor	RRP (€)
600 805	Copper	Ø 7 to Ø 10 mm	18,00
600 844	Galvanized steel	Ø 7 to Ø 10 mm	9,00

Meets with IEC 62305, EN 50164, UNE 21186, NFC 17102 and NP 4426.

Clamps

Gutter clamp for round conductor.

Reference	Material	For conductor	RRP (€)
600 821	Stainless steel	Ø 6 to Ø 10 mm	12,00
600 801	Copper	Ø 6 to Ø 10 mm	10,90
Meets with IEC 62305, EN 50164, UNE 21186, NFC 17102 and NP 4426.			

Bimetallic connector with intermediate plate for flat and round conductors.

Reference	Material	For conductor	RRP (€)
600 870	Cu / Fe	Ø 8 to Ø 10 mm	11,50
600 871	Cu / Fe	Ø 8 to Ø 10 mm and flat up to 30 mm	11,50
Meets with IEC 62305, EN 50164, BS 6651, UNE 21186 and NFC 17102.			

Multiple connector for round conductor connection with termination rods.

Reference	Material	For conductor	Termination rod	RRP (€)
600 846	Galvanized steel	Ø 8 to Ø 10 mm	Ø 16 mm	4,90
600 825	Stainless steel	Ø 8 to Ø 10 mm	Ø 16 mm	9,50
600 807	Copper	Ø 8 to Ø 10 mm	Ø 16 mm	17,00
Meets with IEC 62305, EN 50164, UNE 21186, NFC 17102 and NP 4426.				

Metal sheet clamp with intermediate plate to join metal profiles with flat and round conductors.

Reference	Material	For conductor	Thickness	RRP (€)
600 848	Galvanized steel	Ø 8 to Ø 10 mm	0,7 to 10 mm	5,40
600 827	Stainless steel	Ø 8 to Ø 10 mm	0,7 to 10 mm	10,90
600 809	Copper	Ø 8 to Ø 10 mm	0,7 to 10 mm	17,80
600 861	Aluminium	Ø 8 to Ø 10 mm	0,7 to 10 mm	5,60
Meets with IEC 62305, EN 50164, UNE 21186, NFC 17102 and NP 4426.				

Disconecting clamp.

Reference	Material	For conductor	RRP (€)
600 802	Copper	Up to 30 mm wide	12,70
600 803	Copper	Ø 8 to Ø 10 mm and flat up to 30 mm	32,00
600 822	Stainless steel	Up to 30 mm wide	17,30
600 823	Stainless steel	Ø 8 to Ø 10 mm and flat up to 30 mm	21,50
Meets with UNE 21186, NFC 17102 and NP 4426.			

KS type connector for round conductor.

Referencia	Material	For conductor	RRP (€)
600 847	Galvanized steel	Ø 6 to Ø 10 mm	5,00
600 826	Stainless steel	Ø 6 to Ø 10 mm	11,40
600 808	Copper	Ø 6 to Ø 10 mm	15,00
Meets with IEC 62305, EN 50164, UNE 21186, NFC 17102 and NP 4426.			

Fixed points connecting

Fixed points connecting to connect to the frame of the structure or grounding system.

Reference	Material	Shaft	Thread	For conductor	RRP (€)
600 880	Stainless steel	Ø 10 x 195 mm	M-10/M-12	Connection not included	43,00
600 881	Stainless steel	Shaftless	M-10/M-12	Connection not included	32,00
600 890	Stainless steel	Ø 10 x 60 mm	M-10	Ø 8 to Ø 10 mm and flat up to 30 mm	27,50

Meets with IEC 62305 and EN 50164.

Waterproof puddle flange, to pass the conductor through the wrought of constructions.

Reference	Material	Shaft	Regulable	For conductor	RRP (€)
600 882	Stainless steel	M-10	100 to 200 mm	Ø 8 to Ø 10 mm	48,00
600 883	Stainless steel	M-10	300 to 500 mm	Ø 8 to Ø 10 mm	53,00
600 884	Stainless steel	M-10	500 to 700 mm	Ø 8 to Ø 10 mm	56,00

Meets with IEC 62305 and EN 50164.

Accessories - Miscellaneous

Flexible braid bond, for conducting equipotential bonding.

Reference	Material	Dimensions	Agujeros para fijación	RRP (€)
600 900	Copper	30 x 2 x 180 mm	4 x Ø 5,2 mm and 1 x Ø 10,5 mm	20,00
600 901	Aluminium	30 x 2 x 180 mm	4 x Ø 5,2 mm and 1 x Ø 10,5 mm	17,00

Meets with IEC 62305 and EN 50164.

Spark gap for equipotential bonding to connect aerial mast with the protection system. With plastic coating and protection degree IP 65. Includes stainless steel connectors for connecting with masts Ø 30 to Ø 50mm and round conductors Ø 8 to Ø 10 mm and flat up 30 mm.

Reference	Dimensions	Iimp (10/350µs)	In (8/20µs)	Urimp	RRP (€)
600 910	Ø 43 x 160 mm	100 kA	100 kA	≤ 4 kV	200,00

Meets with IEC 62305 and EN 50164.

Accessories - Miscellaneous

Lightning event counter. Counts and records the impacts received by the system protection. Robust, reliable and autonomous.

Reference	Material	Dimensions	Range	Temperature	RRP(€)
600 920	Plastic	82 x 69 x 45 mm	0 - 9999	- 20° C/ +65° C	188,00

Meets with EN 62561-6, 50164-6 and UTE C 17-106.

Recommended by standards for Lightning Protection.
It is inserted into the downconductor with less ohmic resistance, or failing in the most straight and short.

Guard Tube for mechanical protection of the protection system downconductors.

Reference	Material	Lenght	For conductor	RRP (€)
600 930	Zinc plated steel	2 mt	Up to Ø 15 mm	26,00
600 931	Zinc plated steel	3 mt	Up to Ø 15 mm	35,00
600 932	Zinc plated steel	2 mt	Up to 30 mm wide	34,00
600 940	Galvanized steel	2 mt	Up to Ø 15 mm	52,00
600 941	Galvanized steel	3 mt	Up to Ø 15 mm	60,00
600 942	Galvanized steel	2 mt	Up tp 30 mm wide	59,00
600 950	Stainless steel	2 mt	Up to Ø 15 mm	45,00
600 951	Stainless steel	3 mt	Up to Ø 15 mm	60,00
600 952	Stainless steel	2 mt	Up to 30 mm wide	70,00
600 960	Polyethylene crosslinked	2,5 mt	Up to Ø 15 mm	55,00
600 961	Polyethylene crosslinked	2,5 mt	Up to 30 mm wide	70,00

Meets with IEC 62305, UNE 21186, NFC 17102 and NP 4426.

To avoid voltage contact in crowded public gardens are recommended crosslinked polyethylene tubes. Include plugs, screws and clamps.

Watertight coner to prevent water penetrating on roofs or flat surfaces which are embedded in points or masts.

Reference	Material	Dimensions	Range	RRP (€)
600 965	Neoprene	115 x 115 x 60 mm	Up to Ø 50 mm	90,00

Expansion units.

Reference	Material	Dimensions	Type	RRP (€)
600 970	Solid copper	400 x 100 x Ø 8 mm	Linear	30,00
600 971	Solid aluminum	400 x 100 x Ø 8 mm	Linear	6,00
600 975	Copper flexible braid	30 x 2 x 300 mm	Cross	55,00
600 976	Aluminum flexible braid	30 x 2 x 300 mm	Cross	62,00

For absorbing expansion and contraction produced in solid conductors due to variations in temperature.

Accessories - Miscellaneous

Sealing cover plate for use with screwed fixation to prevent passage of water.

Reference	Material	Dimensions	Color	RRP (€)
600 980	Polypropylene	Ø 37 x 5 mm	Grey	0,50
600 981	Polypropylene	Ø 37 x 5 mm	Copper	0,50

Bimetallic sheet (CUPAL) to prevent galvanic couple in connections between materials of different nature.

Reference	Material	Dimensions	For conductor	RRP (€)
600 990	Strip Cu/Al	0,5 x 40 x 500 mm	-	24,50
600 991	Copper Inside Aluminum Outside	0,5 x 40 x 60 mm	Ø 8 mm	6,20
600 992	Aluminum Inside Copper Outside	0,5 x 40 x 60 mm	Ø 8 mm	5,80

GROUNDING SYSTEMS

AIDITEC SYSTEMS

Special electrodes for high-resistivity soils

ACTIVEROD - Active electro de with humidity exchanger and drained for ionic compound.

Reference	Material	Dimensiones	Shape	RRP (€)
500 060	Copper + compound	Ø 50 x 1000 x 1650 mm	L - Shaped	520,00
500 061	Copper + compound	Ø 50 x 1000 x 2500 mm	L - Shaped	600,00
500 070	Copper + compound	Ø 28 x 1650 mm	Vertical	110,00
500 071	Copper + compound	Ø 28 x 2500 mm	Vertical	140,00
500 080	Copper + compound	Ø 50 x 1650 mm	Vertical	400,00
500 081	Copper + compound	Ø 50 x 2500 mm	Vertical	500,00

Meets with IEC 62305, UL 467, EN 50164, UNE 21186, NFC 17102 and NP 4426.

Especially suitable for conducting grounding in very high-resistivity soils.
Includes stainless steel connector for conductors Ø 8 to Ø 10 mm and up to 30 mm wide.

IONIC FILL - Ionic compound recharging for Active Rod electrodes with humidity exchanger and drained.

Reference	Dimensions	Content	RRP (€)
500 095	Ø 200 x 150 mm	Ionic compound	50,00

Rigid graphite electrode.

Reference	Material	Dimensions	RRP (€)
500 040	Rigid graphite.	Ø 60 x 400 mm	250,00
500 041	Rigid graphite.	Ø 60 x 800 mm	500,00
500 042	Rigid graphite.	Ø 60 x 1200 mm	750,00
500 043	Rigid graphite.	Ø 60 x 1600 mm	1.000,00
500 044	Rigid graphite.	Ø 60 x 2000 mm	1.250,00

Specially suitable for conducting grounding in particularly aggressive soils.
Includes stainless steel connector for conductors Ø 8 to Ø 10 mm and up to 30 mm wide.

Unthreaded grounding extensible electrodes 254µ copperbond steel

Unthreaded grounding extensible electrodes. With 254µ copperbond steel for conducting grounding. With electrolytic copper coating of 254µ, 99.9% purity and extremely high quality, which provides a high degree of corrosion resistance. Possibility to get greater lengths by using the accessories required for its extension and sunk.

Reference	Material	Diameter	Length	RRP (€)
500 100	Copperbond steel	Ø 14,2 mm (5/8")	1,5 mt (5´)	22,80
500 101	Copperbond steel	Ø 14,2 mm (5/8")	2,1 mt (7´)	30,90
500 120	Copperbond steel	Ø 17,2 mm (3/4")	1,5 mt (5´)	28,90
500 121	Copperbond steel	Ø 17,2 mm (3/4")	2,1 mt (7´)	39,50

Meets with BS 7430, BS 6651, UL 467, NFPA 780, IEC 62305, EN 50164, UNE 21186, NFC 17102 and NP 4426.

Available with 100 and 300 micron coating on request.

Accessories for extension and sunk of extensible unthreaded grounding electrodes.

Reference	Denomination	Material	For electrode	RRP (€)
500 140	Coupling	Brass	Ø 14,2 mm (5/8")	11,80
500 141	Coupling	Brass	Ø 17,2 mm (3/4")	14,90
500 150	Driving stud	Hardened steel	Ø 14,2 mm (5/8")	17,90
500 151	Driving stud	Hardened steel	Ø 17,2 mm (3/4")	17,90
500 152	Nailed tip	Hardened steel	Ø 14,2 mm (5/8")	24,90
500 153	Nailed tip	Hardened steel	Ø 17,2 mm (3/4")	25,90

Grounding extensible electrodes with thread 254µ copperbond steel

Threaded grounding extensible electrodes. With 254µ copperbond steel for conducting grounding. With electrolytic copper coating of 254µ, 99.9% purity and extremely high quality, which provides a high degree of corrosion resistance. Possibility to get greater lengths by using the accessories required for its extension and sunk.

Reference	Material	Diameter	Length	RRP (€)
500 160	Copperbond steel	Ø 14,2 mm (5/8")	1,5 mt (5´)	22,00
500 161	Copperbond steel	Ø 14,2 mm (5/8")	2,1 mt (7´)	30,00
500 180	Copperbond steel	Ø 17,2 mm (3/4")	1,5 mt (5´)	29,00
500 181	Copperbond steel	Ø 17,2 mm (3/4")	2,1 mt (7´)	39,00

Meets with BS 7430, BS 6651, UL 467, NFPA 780, IEC 62305, EN 50164, UNE 21186, NFC 17102 and NP 4426.

Available with 100 and 300 micron coating on request.

Accessories for extension and sunk of extensible threaded grounding electrodes.

Reference	Denomination	Material	For electrode	RRP (€)
500 190	Coupling	Brass	Ø 14,2 mm (5/8")	10,00
500 191	Coupling	Brass	Ø 17,2 mm (3/4")	13,00
500 198	Driving stud	Hardened steel	Ø 14,2 mm (5/8")	6,50
500 199	Driving stud	Hardened steel	Ø 17,2 mm (3/4")	8,00
500 196	Nailed tip	Hardened steel	Ø 14,2 mm (5/8")	11,50
500 197	Nailed tip	Hardened steel	Ø 17,2 mm (3/4")	11,50

Galvanized steel extensible electrodes

Galvanized steel extensible electrode. Suitable to get a good resistance to slightly aggressive soils.

Reference	Denomination	Diameter	Length	RRP (€)
500 260	Galvanized steel	Ø 20 mm	1,5 mt	44,00

Accessories for extension and sunk of extensible galvanized steel grounding electrodes.

Reference	Denomination	Material	For electrode	RRP (€)
500 280	Nailed tip	Hardened steel	Ø 20 mm	5,70

Solid copper grounding rods

Suitable to get and maintaining good resistance in very aggressive soils. Possibility to get greater lengths by using the accessories required for its extension and sunk.

Reference	Material	Diameter	Length	RRP (€)
500 200	Electrolytic copper	Ø 15 mm	1,2 mt	81,00
500 201	Electrolytic copper	Ø 20 mm	1,2 mt	155,00

Meets with BS 7430, BS 6651, UL 467, NFPA 780, IEC 62305, EN 50164, UNE 21186, NFC 17102, NP 4426.

Accessories for extension and sunk of solid copper grounding rods.

Referencia	Denomination	Material	For electrode	RRP (€)
500 210	Driving stud	Copperbond steel	Ø 15 mm	7,00
500 211	Driving stud	Copperbond steel	Ø 20 mm	8,00
500 215	Threaded pin	Brass	Ø 15 mm y Ø 20 mm	4,00
500 220	Nailed tip	Copperbond steel	Ø 15 mm	6,30
500 221	Nailed tip	Copperbond steel	Ø 20 mm	7,40

Solid stainless steel grounding rods

Suitable to get and maintaining good resistance in very aggressive soils. Possibility to get greater lengths by using the accessories required for its extension and sunk.

Reference	Material	Diameter	Length	RRP (€)
500 230	Stainless steel	Ø 16 mm	1,2 mt	66,00

Meets with BS 7430, BS 6651, UL 467, NFPA 780, IEC 62305, EN 50164, NFPA 780, UNE 21186, NFC 17102, NP 4426.

Accessories for extension and sunk of solid stainless steel grounding rods.

Reference	Denomination	Material	For electrode	RRP (€)
500 250	Driving stud	Hardened steel	Ø 16 mm	6,50
500 251	Threaded pin	Stainless steel	Ø 16 mm	5,30
500 252	Nailed tip	Stainless steel	Ø 16 mm	6,30

Clampings for grounding electrodes

Clampings for connecting conductors and grounding electrodes.

Reference	Material	For electrodes	Round conductor	Flat conductor	RRP (€)
500 300	Galvanized steel	Ø 20 mm	Up to Ø 10 mm	Up to 40 mm	8,70
500 310	Copperbond steel	Ø 20 mm	Up to 70 mm²	-	4,80
500 320	Brass	Ø 17,2 mm	Up to 50 mm²	Up to 40 mm	15,90
500 330	Copper	Ø 20 mm	Up to 70 mm²	-	20,90
500 340	Brass	Ø 20 mm	-	Up to 30 mm	13,40
500 350	Brass	Ø 17,2 mm	Up to 70 mm²	-	7,60
500 380	Stainless steel	Ø 17,2 mm	Up to 70 mm²	Up to 30 mm	18,00

Meets with EN 50164, UNE 21186, NFC 17102, NP 4426, BS 1400 and BS 2874.

Goose foot

Foot goose grounding electrode manufactured with flat conductor 30 x 2 mm.

Reference	Material	Dimensions	RRP (€)
500 360	Copper	4 mt + 3 x 6 mt	580,00
500 361	Stainless steel	4 mt + 3 x 6 mt	290,00
500 370	Copper	1 mt + 3 x 3 mt	260,00
500 371	Stainless steel	1 mt + 3 x 3 mt	130,00

Meets with UNE 21186, NFC 17102 and NP 4426.

Recommended as grounding electrodes to obtain a very low resistance at very rocky soils due to the large contact surface with the ground.

Grounding plates

Grounding plates which include clamp for round conductors Ø 8/10 mm and flat up to 30 mm wide.

Reference	Material	Dimensions	RRP (€)
500 401	Copper	500 x 500 x 1,5 mm	150,00
500 411	Copper	500 x 1000 x 1,5 mm	300,00
500 402	Copper	500 x 500 x 2 mm	205,00
500 412	Copper	500 x 1000 x 2 mm	385,00
500 403	Copper	500 x 500 x 3 mm	295,00
500 413	Copper	500 x 1000 x 3 mm	590,00
500 430	Galvanized steel	500 x 500 x 3 mm	110,00
500 431	Galvanized steel	500 x 1000 x 3 mm	220,00

Meets with IEC 62305, EN 50164, EN 13601, BS 2874, UNE 21186, NFC 17102, NFPA 780 and NP 4426.

Recommended as grounding electrodes to obtain a very low resistance at very rocky soils due to the large contact surface with the ground.

Enhancers of ground conductivity

WELLCONDUCTOR is an ionic compound totally ecological, non-corrosive, very hygroscopic and quick action, which substantially improves the conductivity of the soil due to its electrolyte base, and provides the grounding electrode of a reserve of conductive material with high resistance to permeability and long life, in order to maintain the obtained resistance for as long as possible, depending on the specific conditions of the soil.

Reference	Material	Dimensions	RRP (€)
500 460	WELLCONDUCTOR	3 kg Container	50,00
500 470	Special Graphite T.T.	25 kg bag	110,00
500 480	Special Clay T.T.	25 kg bag	170,00

Meets with EN 50164, UNE 21186, NFC 17102 and NP 4426.

Joint protection

For the protection of air and buried junctions against corrosion.

Reference	Material	Dimensions	RRP (€)
500 490	Anti corrosive strip	Coil 50mm x 10mt	20,00
500 491	Anti corrosive strip	Coil 100mm x 10mt	40,00
500 498	Anticorrosive painting Galvanized color	0,75 lt container	75,00
500 499	Anticorrosive painting Copper color	0,75 lt container	75,00

Inspection pits for grounding systems

Inspection pits made of different materials, utilized for locating and register the grounding electrodes. Optimal design, resistant to chemicals substances and the ultravioleta rays. For use in different industrial applications.

Reference	Material	Dimensions	RRP (€)
500 510	Polypropylene	250 x 200 x 215 mm	75,00
500 512	Polypropylene	200 x 200 x 200 mm	45,00
500 513	Polypropylene	300 x 300 x 300 mm	80,00
500 520	Cast iron	245 x 245 x 115 mm	120,00
500 530	Concrete	320 x 320 x 190 mm	55,00

Meets with EN 50164, UNE 21186, NFC 17102 and NP 4426.

Bonding bars for inspection pits grounding

To facilitate equipotential connection of the electrodes grounding with round conductors Ø 8/10 mm and flat conductors up to 30 mm wide.

Reference	Material	Dimensions No. conductors	For inspection pit	RRP (€)
500 511	Copper	25 x 5 x 200 mm 4 Conductors	Polypropylene Ref 500 510	55,00
500 521	Copper	25 x 5 x 150 mm 4 Conductors	Cast iron Ref 500 520	50,00
500 531	Copper	25 x 5 x 300 mm 4 Conductors	Concrete Ref 500 530	65,00
500 540	Stainless steel	60 x 5 x 196 mm 4 Conductors	Polypropylene Ref. 500 512	60,00
500 541	Stainless steel	60 x 5 x 242 mm 6 Conductors	Polypropylene Ref. 500 513	70,00

Meets with EN 50164, UNE 21186, NFC 17102 and NP 4426.

Equipotential bonding
Spark gap for ground bonding

Spark gap for ground bonding, with plastic material coating and degree of protection IP 65, which includes stainless steel connectors for connection with round and flat conductors.

			Conductor range		
Reference	Material	Dimensions	Round	Plate	RRP (€)
500 550	Stainless steel	Ø 45 x 160 mm	Ø 8/10 mm	30 x 3,5 mm	190,00

Meets with IEC 62305, EN 50164, UNE 21186, NFC 17102 and NP 4426.

Recommended by standards for lightning protection to join different grounding systems where it is not possible to make the direct equipotential union of the conductors due to corrosion problems.
Normally grounding are maintained isolated, preventing corrosion problems. When a potential difference is produced by increasing the voltage, the spark gap works joining the differents grounding systems, avoiding current passing through the equipment and facilities inside and can damage or destroy them.

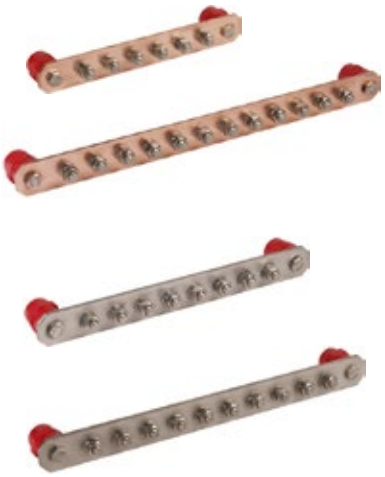
Equipotential bonding bar

Equpotential bonding bar to attach to the wall, made of halogen-free material with serial terminal system that allows union up to 10 conductors of different types and sections.

			Conductor range		
Reference	Material	Dimensions	Round	Plate	RRP (€)
500 560	Housing - Plastic Contact Tinned copper	200 x 65 x 56 mm	7 x Ø 2,5 mm 2 x Ø 8/10 mm	1 x 30 x 2 mm a 30 x 4 mm	43,00

Meets with BS 2874, IEC 62305 and EN 50164.

Equipotentiality bonding bars



Equipotentiality bonding bars to attach to the wall using thermoset insulators, self-extinguishing, halogen-free and resistant to ultraviolet rays. With screw connection system stainless steel M-10, which allows the union of conductors of different types and sections through appropriate terminals.

Reference	Material	Dimensionss	Nr connections	RRP (€)
500 570	Copper	295 x 40 x 5 mm	6	120,00
500 571	Copper	365 x 40 x 5 mm	8	145,00
500 572	Copper	435 x 40 x 5 mm	10	160,00
500 573	Copper	505 x 40 x 5 mm	12	185,00
500 580	Stainless steel	295 x 40 x 6 mm	6	110,00
500 581	Stainless steel	365 x 40 x 6 mm	8	135,00
500 582	Stainless steel	435 x 40 x 6 mm	10	150,00
500 583	Stainless steel	505 x 40 x 6 mm	12	175,00

Meets with BS 2874, IEC 62305 and EN 50164.

Stainless steel covered for equipotentiality bonding bars.

Reference	Material	Dimensions	Connections Numbers	RRP (€)
500 596	Stainless steel	301 x 60 x 0,8 mm	6	28,00
500 597	Stainless steel	371 x 60 x 0,8 mm	8	32,00
500 598	Stainless steel	441 x 60 x 0,8 mm	10	36,00
500 599	Stainless steel	511 x 60 x 0,8 mm	12	40,00

Meets with BS 2874, IEC 62305 and EN 50164.

Thermoset insulator, self-extinguishing, halogen free and ultraviolet rays resistant, to fix equipotentiality bonding bars. Includes set of plugs and screws.

Reference	Material	Dimensions	Thread	RRP (€)
500 590	Reinforced polyamide with fiberglass	Ø 40 x 35 mm	Internal M-10 x 10mm	20,00

EXOTHERMIC WELDING

AIDITEC SYSTEMS

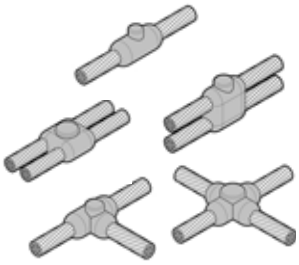
The exothermic welding technique relies on reducing the copper oxide to copper by metallic aluminum, produced by an exothermic reaction through a initiator reactive which provides sufficient power to activate the process, which takes place in a few seconds securely within an graphite mould designed according to the shape of the elements to be connected and the type of union to be performed. The result of this type of welding is the molecular bonding of the materials being joined, and therefore offers the following advantages amongst others:

- Union of materials of different nature, shape and section quickly and safely.
- Permanent welding and does not increase the resistance.
- No loose or corrode, so it has a shelf life equal to installation.
- Current capacity equal to or greater than the conductor.
- Tolerates repeated anomalous currents without failure during the operation.
- Mechanical strength and electrical conductivity higher than welded conductors.

Moulds

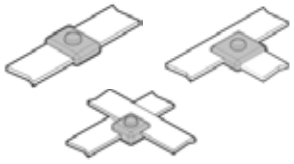
Graphite moulds in high quality and low granulometry that allow between 80 and 100 welds of the same type.

Connections for round conductors



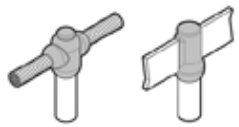
Reference	Union type	Conductor range	RRP (€)
400 000	Horizontal Linear	From 25 mm² to 120 mm²	142,00
400 020	In "T" horizontal	From 25 mm² to 185 mm²	142,00
400 040	Horizontal Parallel	From 25 mm² to 120 mm²	142,00
400 060	Vertical Parallel	From 25 mm² to 120 mm²	142,00
400 080	In "+" horizontal	From 25 mm² to 120 mm²	142,00

Connections for flat conductors



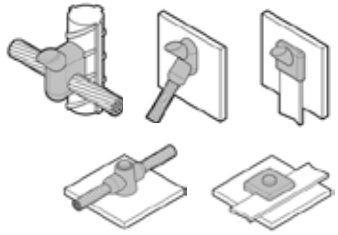
Reference	Union type	Conductor range	RRP (€)
400 100	Horizontal Linear	From 25 x 3 mm to 30 x 2 mm	108,00
400 120	In "T" horizontal	From 25 x 3 mm to 30 x 2 mm	108,00
400 140	In "+" horizontal	From 25 x 3 mm to 30 x 2 mm	108,00

Connections for round and flat conductors with grounding electrodes



Reference	Union type	Conductor type	Electrode	RRP (€)
400 200	In "T"	Round up to 95 mm²	Up to Ø 17.2 mm	138,00
400 220	In "T"	Flat up to 30 x 2 mm	Up to Ø 17.2 mm	108,00

Other connections



Reference	Union type	Conductor type	Union with	RRP (€)
400 300	In "+" superimposed	Round up to 120 mm²	Corrugated up to Ø 40 mm	108,00
400 320	Vertical	Round up to 120 mm²	Steel surface	138,00
400 340	Horizontal	Round up to 70 mm²	Steel surface	63,00
400 360	Vertical	Flat up to 30 x 2 mm	Steel surface	138,00
400 380	Horizontal	Flat up to 30 x 2 mm	Steel surface	138,00

Cadweld Multi

Cadweld Multi combining a versatile mould with a set of ceramic tissue gaskets that allow different types of welds among round conductors up to Ø 10 mm, with flat conductors up to 30 x 3.5 mm and with grounding electrodes up to Ø 17.2 mm without changing the mold in each connection type.
The Kit includes:
1 Multiple clamp for fastening of the molds.
1 Mould for horizontal welding.
1 Mould welding for electrode Ø 12,5 mm.
1 Mould welding for electrode Ø 14.2 mm.
1 Mould welding for electrode Ø 17.2 mm.
1 Clip closure.
1 Set of accessories.
1 Scraper.
Instruction Sheet.

Reference	Denomination	RRP (€)
400 400	Multi Cadweld Welding Kit.	825,00

The welding compound to use for Cadweld Multi are the references 400 505 and 400 506, of 90 and 115 g respectively.

Materials included in the kit Cadweld Multi

Individual references of materials included in the kit Cadweld Multi.

Reference	Material	RRP (€)
400 420	Set of 33 ceramic tissue gaskets for Cadweld Multi.	41,00
400 421	Multiple clamp for fastening of the molds.	315,00
400 422	Mould for horizontal welding.	118,00
400 423	Mould welding for electrode Ø 12,5 mm.	290,00
400 424	Mould welding for electrode Ø 14.2 mm.	118,00
400 425	Mould welding for electrode Ø 17.2 mm.	118,00
400 426	Clip closure.	72,00
400 427	Set of accessories.	32,00
400 428	Scraper.	10,00

Welding compound

Welding compound in a high quality alloy F20, suitable for connecting copper / copper, copper / steel and steel / steel.

Reference	Material	RRP (€)
400 500	1 loads 15gr + 1 initiators + 1 metallic disks	3,78
400 501	1 loads 25gr + 1 initiators + 1 metallic disks	4,53
400 502	1 loads 35gr + 1 initiators + 1 metallic disks	4,93
400 503	1 loads 45gr + 1 initiators + 1 metallic disks	5,59
400 504	1 loads 65gr + 1 initiators + 1 metallic disks	6,72

* Packing 20 units.

400 505	1 loads 90gr + 1 initiators + 1 metallic disks	9,08
400 506	1 loads 115gr + 1 initiators + 1 metallic disks	10,85
400 507	1 loads 150gr + 1 initiators + 1 metallic disks	12,96
400 508	1 loads 200gr + 1 initiators + 1 metallic disks	16,42
400 509	1 loads 200gr + 1 initiators + 1 metallic disks	19,55

* Packing 10 units.

Accesories

Accessories required to make exothermic welding.

Reference	Material	RRP (€)
400 600	Handle type L 160 for mould type C	128,00
400 601	Handle type L 161 for mould type Z	169,00
400 602	Handle type M 129 for mould type A	65,00
400 603	Lighter type T 320	11,00
400 604	Replacement stones for lighter T 320 (10 Un)	1,00
400 605	Cleaning brush for round conductors	80,00
400 606	Cleaning brush for flat conductors	10,50
400 607	Scraper B136A for welding mould	11,00
400 608	Scraper B136B for welding mould	11,00
400 609	Scraper B136F for welding mould	9,00
400 610	Sealer moulds. Container 900 gr	32,00
400 611	Box 25 pc. compensation sheets	5,00

SURGE PROTECTION

AiDiTEC SYSTEMS

Surge Protection devices for power supply lines

Surge arresters Type 1

The surge arresters type 1 are recommended for installations where there is a high probability of atmospheric discharges.

Compact surge arresters

Reference	Description	Uc. Max	Iimp	Up	RRP (€)
300 010 (AD4-400/240)	Tetrapolar protector	255 V	100 kA	1,2 kV	575,00
300 011 (AD2-400/240)	Bipolar protector	255 V	100 kA	1,2 kV	295,00
300 012 (AD1-200/240)	Unipolar protector for F-N	255 V	50 kA	1,2 kV	140,00
300 013 (AD1-400/240)	Unipolar protector for N-T	255 V	100 kA	1,2 kV	155,00

Available for all types of grounding system: TT, IT, TN-S and TN-C.
Standards: IEC 61643-1 / EN 61643-11 / UL 1449

Pluggable surge arresters

Reference	Description	Uc. Max	Iimp (F-N / N-T)	Up	RRP (€)
300 022 (AA1-25/240)	Unipolar protector for F-N	255 V	25 kA	1,5 kV	170,00
300 023 (AA1-100/240)	Unipolar protector for N-T (*)	255 V	100 kA	1,5 kV	210,00
300 024 (AA2-H100/240)	Bipolar protector (*)	255 V	25/100 kA	1,5 kV	380,00
300 025 (AA4-H100/240)	Tetrapolar protector (*)	255 V	25/100 kA	1,5 kV	720,00

(*) N-T protectors. NOT pluggable.
For remote signaling please consult price and reference.
Available for all types of grounding system: TT, IT, TN-S and TN-C.
Standars : IEC 61643-1 / EN 61643-11 / UL 1449

Cartridges for pluggable surge arresters

Reference	Description	Uc. Máx	Iimp	Up	RRP (€)
300 604 (A25/240)	F-N cartridges	255 V	25 kA	1,5 kV	100,00

Surge arresters Type 1 + 2

The surge arresters Type 1 + 2 are installed at the head of installations to protect and it is combined the characteristics of Type 1 and Type 2.

Compact surge arresters

Reference	Description	Uc. Max (F-N / N-T)	Iimp (L-N) (F-N / N-T)	Up	RRP (€)
300 060 (BD4-100/240)	Tetrapolar protector	255 V / 255 V	12,5 / 25 kA	1,2 kV	440,00
300 061 (BD2-100/240)	Bipolar protector	250 V / 255 V	12,5 / 25 kA	1,2 kV	220,00
300 062 (BD1-100/240)	Unipolar protector	255 V	25 kA	1,2 kV	120,00

For remote signaling please consult price and reference.
Available for all types of grounding system: TT, IT, TN-S and TN-C.
Standars: IEC 61643-1 / EN 61643-11 / UL 1449

Surge arresters Type 2

The surge arresters Type 2 are installed at the head of electrical installations and at secondary power panels. Protect electronic and electrical equipment against transient overvoltages of origin industrial, atmospheric and maneuvering.

Pluggable surge arresters

Reference	Description	Uc. Max	In	I Max	Up	RRP (€)
300 120 (BV1-25/240)	Unipolar protector	250 V	10 kA	25 kA	1,2 kV	32,50
300 121 (BV1-40/240)	Unipolar protector	250 V	20 kA	40 kA	1,2 kV	55,00
300 122 (BV1-60/240)	Unipolar protector	250 V	30 kA	60 kA	1,2 kV	70,00
300 140 (BD2-25/240)	Bipolar protector	250 / 255 V	10 kA	25 kA	1,2 kV	64,00
300 141 (BD2-40/240)	Bipolar protector	250 / 255 V	20 kA	40 kA	1,2 kV	89,00
300 142 (BD2-60/240)	Bipolar protector	250 / 255 V	30 kA	60 kA	1,2 kV	115,00
300 130 (BD4-25/240)	Tetrapolar protector	250 / 255 V	10 kA	25 kA	1,2 kV	115,00
300 131 (BD4-40/240)	Tetrapolar protector	250 / 255 V	20 kA	40 kA	1,2 kV	174,00
300 132 (BD4-60/240)	Tetrapolar protector	250 / 255 V	30 kA	60 kA	1,2 kV	244,00

Cartridges for pluggable surge arresters

Reference	Description	Uc. Max	In	I Max	Up	RRP (€)
300 635 (V25/240)	F-N Cartridges	250 V	10 kA	25 kA	1,2 kV	28,75
300 636 (V40/240)	F-N Cartridges	250 V	20 kA	40 kA	1,2 kV	43,50
300 637 (V60/240)	F-N Cartridges	250 V	30 kA	60 kA	1,2 kV	61,00
300 638 (D30/240)	N-T Cartridges	255 V	10 kA	30 kA	1,2 kV	32,00
300 639 (D40/240)	N-T Cartridges	255 V	20 kA	40 kA	1,2 kV	46,00
300 640 (D60/240)	N-T Cartridges	255 V	30 kA	60 kA	1,2 kV	61,00

Surge arresters Type 3

The surge arresters Type 3 are installed in the electrical supply of final receptors and coordinated with Type 2 surge arresters.

Compact surge arresters

Reference	Description	Uc. Max	In (F-N / N-T)	I Max (F-N / N-T)	Up (F-N / N-T)	RRP (€)
300 202 (CV2-10/240)	Bipolar Protector	250 V	5/10 kA	10/20 kA	1,2/1,5 kV	45,00

It Includes LED for status signaling.
Available for all types of grounding system: TT, IT, TN-S and TN-C.
Standards: IEC 61643-1 / EN 61643-11 / UL 1449

Pluggable surge arresters

Reference	Description	Uc. Max	In	I Max	Up	RRP (€)
300 210 (CV1-15/240)	Unipolar protector	250 V	7 kA	15 kA	1,2 kV	30,00
300 211 (CV2-15/240)	Bipolar protector	250 V	7 kA	15 kA	1,2 kV	60,00
300 212 (CV4-15/240)	Tetrapolar protector	250 V	7 kA	15 kA	1,2 kV	120,00

For remote signaling please consult price and reference.
Available for all types of grounding system: TT, IT, TN-S and TN-C.
Standars: IEC 61643-1 / EN 61643-11 / UL 1449

Cartridges for pluggable surge arresters

Reference	Description	Uc. Max	In	I Max	Up	RRP (€)
300 634 (V15/240)	Cartridge	250 V	7 kA	15 kA	1,2 kV	20,00

Surge Protection devices for photovoltaic installations

Surge arresters Type 2 for protection devices working on continuous current.
Protect photovoltaic equipment against transient overvoltages of atmospheric origin and maneuvering.

Pluggable surge arresters

Reference	Description	Uc. Max	In	I Max	Up	RRP (€)
300 172 (BF3-40/600)	Tripolar protector	600 Vcc	20 kA	40 kA	1,8 kV	123,20
300 173 (BF3-40/1000)	Tripolar protector	1060 Vcc	20 kA	40 kA	3,2 kV	138,60

For remote signaling please consult price and reference.
Standars: IEC 61643-1 / EN 61643-11 / UL 1449

Cartridges for pluggable surge arresters

Reference	Description	Uc. Max	In	I Max	Up	RRP (€)
300 641 (V40/320)	Cartridges	320 Vcc	20 kA	40 kA	1,0 kV	45,00
300 642 (V40/530)	Cartridges	530 Vcc	20 kA	40 kA	1,6 kV	45,00

Surge Protection devices for data lines

Surge arresters for data lines protect the electronic equipment in the network of communication against any overvoltage induced on the data lines.
These arresters must be installed as close as possible to the equipment to protect.

Pluggable surge arresters for data lines

Reference	Description	Uc. Max	In	I Max	Up (L-L / L-T)	IL	RRP (€)
300 301 (U/TD-B0)	Base for nominal voltages of 5V, 12V, 24V and 48V.						35,00
300 310 (D/5-B0)	Protection 1 pair (Cartridge)	6 Vcc	5 kA	10 kA	80/350 V	500 mA	35,00
300 311 (D/12-B0)	Protection 1 pair (Cartridge)	15 Vcc	5 kA	10 kA	150/350 V	500 mA	35,00
300 312 (D/24-B0)	Protection 1 pair (Cartridge)	28 Vcc	5 kA	10 kA	200/500 V	500 mA	35,00
300 313 (D/48-B0)	Protection 1 pair (Cartridge)	60 Vcc	5 kA	10 kA	250/500 V	500 mA	35,00
300 302 (U/TD-A0)	Base for nominal voltages of 110V and 250V.						35,00
300 314 (D/110-A0)	Protection 1 pair (Cartridge)	180 Vcc	5 kA	10 kA	1/0,75 kV	500 mA	45,00
300 315 (D/250-A0)	Protection 1 pair (Cartridge)	280 Vcc	5 kA	10 kA	0,5 kV	500 mA	45,00

Norma: IEC 61643-21.

Surge arresters for telephone lines ,ADSL and Ethernet

Reference	Description	Uc. Max	In (L-L / L-T)	I Max (L-L / L-T)	Up (L-L / L-T)	IL	RRP (€)
300 520 (TD/110- RJ11-4)	Protector for telephone lines with RJ11 connector	180 Vcc	2 kA	5 kA	200/500 V	0,5 A	130,00
300 522 (TD/5-RJ45-H-8-Cat 5)	Protector for Ethernet with RJ45 connector. Cat 5	6 Vcc	0,1/1 kA	0,3/2 kA	15/800 V	1 A	130,00
			For 100 Mega Bytes				
300 523 (TD/5-RJ45-H-8-Cat 6)	Protector for Ethernet with RJ45 connector. Cat 6	6 Vcc	0,1/2 kA	0,3/4 kA	30/800 V	1 A	150,00
			For 1000 Mega Bytes				

Standar: IEC 61643-21.

Surge Protection devices for coaxial cables

Surge arresters for coaxial cables protect electronic equipment associated with the coaxial installation against any overvoltage induced on coaxial cables.
These arresters must be installed as close as possible to the equipment to protect.

Reference	Description	Uc. Max	I Max	Impedancia	Up	RRP (€)
300 463 (CD-90-B-HH-75)	Protector BNC type Female - Female	70 Vcc	20 kA	75 ohm	700 V	60,50
300 464 (CD-250-B-HH-75)	Protector BNC type Female - Female	200 Vcc	20 kA	75 ohm	750 V	60,50
300 465 (CD-90-B-MH-75)	Protector BNC type Male - Female	70 Vcc	20 kA	75 ohm	700 V	60,50
300 466 (CD-250-B-MH-75)	Protector BNC type Male - Female	200 Vcc	20 kA	75 ohm	750 V	60,50
300 467 (CD-90-F-HH-75)	Protector F type Female - Female	70 Vcc	20 kA	75 ohm	700 V	60,50
300 468 (CD-250-F-HH-75)	Protector F type Female - Female	200 Vcc	20 kA	75 ohm	750 V	60,50
300 460 (CD-90-F-MH-75)	Protector F type Male - Female	70 Vcc	20 kA	75 ohm	700 V	60,50
300 462 (CD-250-F-MH-75)	Protector F type Male - Female	200 Vcc	20 kA	75 ohm	750 V	60,50

Standard: IEC 61643-21.
Available in other types of connection and impedance.

NOTE:
In this catalog are contemplated the most common protectors. If you need a protector with different characteristics to those contained in this catalog, contact us and our technical department will advise you in choosing the most appropriate protector.
(Tlf - 0034 963842957 - info@aiditecsystems.com)

GENERAL CONDITIONS

- Prices are in euros and do not include VAT or any other tax.
- Standard packaging is included.
- All products are guaranteed for 2 years against any manufacturing defects.

LEGAL NOTICES

- This price list is not binding and can be varied without notice.
- Due to the policy of constantly improving our products, AIDITEC SYSTEMS, SL reserves the right to change without notice the products in this catalog.
- The photos, drawings and technical descriptions of this catalog are not binding. AIDITEC SYSTEMS, SL reserves the right to change at any time and without notice, manufacturing, according to the evolution of standards and techniques used at all times.
- AIDITEC SYSTEMS, SL not responsible for printing errors that may appear in this catalog.
- You can only copy, electronic reproduction or other permit under AIDITEC SYSTEMS, SL

Editing Date: June 2015 - 4th Edition. This prices list replaces the previous until further notice.

AIDITEC SYSTEMS, SL - Ronda Narciso Monturiol, 17 - Edif. 1 - Bajo 8
(Parque Tecnológico) - 46980 Paterna (Valencia) ESPAÑA
Tel. (0034) 96 384 29 57 - www.aiditecsystems.com