

## THUNDER 45

THUNDER 45 is an Iranian lightning rod that categorized in Early Streamer Emission (ESE). THUNDER has been produced according to NFC 17 102. The metal parts of the THUNDER 45 Active Lightning Rod that will carry the lightning strike are made of stainless steel (Inox) material against interactions and corrosion. Thanks to this feature, the lightning rod remains robust and durable for a long time against heavy natural conditions.



### Principle of operations:

Thunderclouds naturally create an atmospheric electric field directly beneath them due to difference in charges between the cloud and the earth. An electric field increases upon approaching a storm cloud. Then the THUNDER45 starts to charge itself just as a result of this difference (it is similar to feeling the static with the hair on your hand while you are just approaching an electrified object, even without touching it). The THUNDER45 stores the energy in capacitors inside. Just before the lightning is about to strike, the atmospheric electrical field rapidly increases. At the moment when the ESE conductor voltage reaches maximum capacity level, the device triggers full discharge of the capacitor i.e. ionizes the surrounding air in the direction of maximum difference in charges.



### THUNDER 45, PROTECTION RADIOUS (Rp)

Calculated according to UNE 21186:2011, NF C 17-102:2011, NP 4426:2016

PROTECTION LEVEL	EFFICIENCY	THUNDER 45						
		H (m)						
		2	4	6	8	10	20	60
I	98%	25	51	63	64	64	65	66
II	95%	28	57	71	72	72	74	75
III	90%	32	64	81	82	83	86	90
IV	80%	36	72	90	91	92	97	105

### Technical Data:

The maximum protection radius: 105m

Activation time: 45 micro second

Rolling radius: 45m

Material: Stainless steel

Weight: 2.6 Kg

