

# STAR® 645 Evolution

**EARLY STREAMER EMISSION (ESE)  
AIR TERMINAL – TESTING REMOTE**

Reference	STAR645 Evo
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Technical specifications	
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Power Δt	45 - microseconds boot time (μs)
Lightning shock	Wave 10/350 microseconds
Test 100 kA	NFC 17102
Streamer	<ul style="list-style-type: none"> <li>System technology with controlled priming technology®</li> <li>High impulse voltage</li> </ul>
Structure	<ul style="list-style-type: none"> <li>Electromagnetic cage, with electromechanical crimping</li> <li>6 stainless steel 316 differential fins</li> </ul>

Fonctionnement	
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Ascending Tracer Detection	<ul style="list-style-type: none"> <li>Continuous measurement of ambient natural electric field</li> </ul>
Power Management	<ul style="list-style-type: none"> <li>Totally autonomous</li> <li>No external power supply</li> </ul>
Maintenance	<ul style="list-style-type: none"> <li>Modular parts interchangeable in factory</li> <li>Dimension - 244 x 151 mm - M20 thread</li> <li>Tightening torque</li> </ul>

Test system	<ul style="list-style-type: none"> <li>Star Evolution Tester</li> </ul>
Satellit self test	<ul style="list-style-type: none"> <li>Photovoltaic autonomy (no battery)</li> </ul>
Specific remote control	<ul style="list-style-type: none"> <li>Included (Reference S1205)</li> </ul>
Fixing lug	<ul style="list-style-type: none"> <li>Stainless steel</li> </ul>
Lightning down connection	<ul style="list-style-type: none"> <li>Included (Reference RAPC01)</li> </ul>
Universal mounting bracket	<ul style="list-style-type: none"> <li>Included (Reference MANR01)</li> </ul>
Instructions for use	<ul style="list-style-type: none"> <li>included</li> </ul>

Impact on the environment	<ul style="list-style-type: none"> <li>100% recyclable</li> </ul>
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Guarantee	► 5 years manufacturer
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Conditioning	
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Packaging	<ul style="list-style-type: none"> <li>Adapted to the size of the STAR</li> <li>Dedicated custom cradles</li> </ul>
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Size of the box	<ul style="list-style-type: none"> <li>300 x 200 x 150 mm</li> </ul>
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Net weight	<ul style="list-style-type: none"> <li>1,925 Kgs</li> </ul>
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Gross weight	<ul style="list-style-type: none"> <li>2,045 Kgs (with specific box)</li> </ul>
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Certifications	
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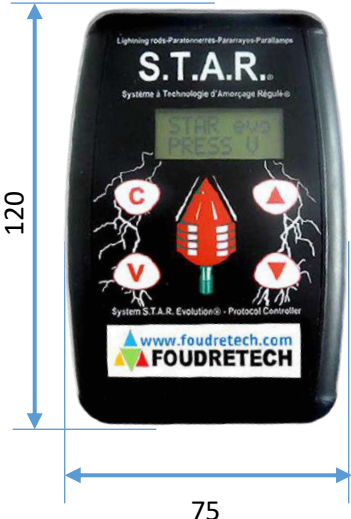
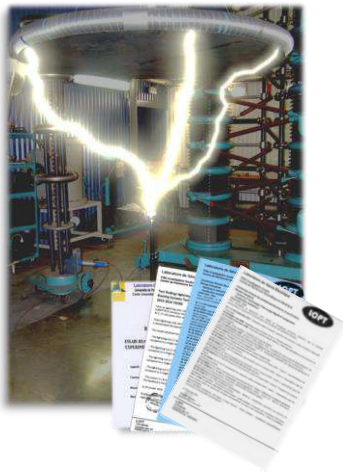
Traceability / Control	<ul style="list-style-type: none"> <li>Laser marking or specific engraving</li> <li>Indestructible self-labeling system</li> <li>Authentication by serial number</li> <li>Certified reference to the order</li> </ul>
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Conformity	<ul style="list-style-type: none"> <li>NFC17102/1995</li> <li>NFC17102/2009</li> <li>NFC17102/2011</li> </ul>
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Customs Code	<ul style="list-style-type: none"> <li>85 36 90 85</li> </ul>
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Solar segment





- Early Streamer Emission (ESE). Air Terminal STAR645®
- Lightning Rod - STAR® Evolution - Testing remote.



## STAR® 645 Evolution

### ► Testing Remote

**Function test included.**

Reference : STAR645 evo

Description: **Lightning rod - Air Terminal  
Early Streamer Emission  
Autonomous photovoltaic system.  
Remote control tests.**

Power : **( $\Delta I = 45 \mu s$ )**  
► 6 stainless steel 316 differential fins

Net weight: 1.925 kgs  
Gross weight: 2.045 kgs (Package included)  
Dimensions: 244x151 mm



Included in the STAR® 645 Evo pack.

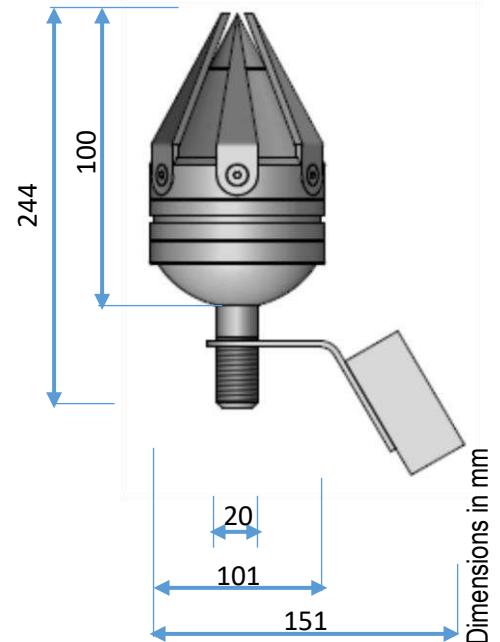
- ✓ STAR®645 Evolution Photovoltaic,
- ✓ Remote test remote control,
- ✓ Conductor fixing connection,
- ✓ Adaptation all supports,
- ✓ Technical assistance,
- ✓ Warranty 5 years manufacturer.

(Ref. STAR645 evo)

(Ref. S1205)

(Ref. RAPC02)

(Ref. MANR01)





**Early Streamer Emission (ESE). Air Terminal STAR645®**

**Lightning Rod - STAR® Evolution - Testing remote.**

**STAR® 645 Evolution - PROTECTION RADIUS  
 EFFICIENCY +45µs**

H meters	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
2	25	32	34	36
3	38	48	51	55
4	51	65	70	73
<b>5</b>	<b>62</b>	<b>80</b>	<b>83</b>	<b>89</b>
10	64	83	91	94
20	65	86	97	99

Protection distances in meters

► **Advantages of the STAR® Evolution ESEAT Testing remote :**

- ✓ Stand-alone Photovoltaic Power Supply,
- ✓ Remote control tests,
- ✓ Function tests,
- ✓ Product recognition,
- ✓ Electrical continuity test,
- ✓ Dating of the impacts of the lightning,
- ✓ List of lightning strikes,
- ✓ Respect of the environment,
- ✓ 5 years manufacturer's warranty.



**THE + SAFETY**

► The test system is used to interrogate the STAR® Evolution lightning rod, and to know its operating status without moving.

Manage the "health" and history of your STAR in real time.

This advanced technology is for the user, through a gain in security after information processing.

