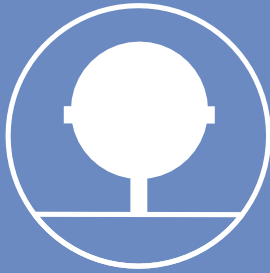
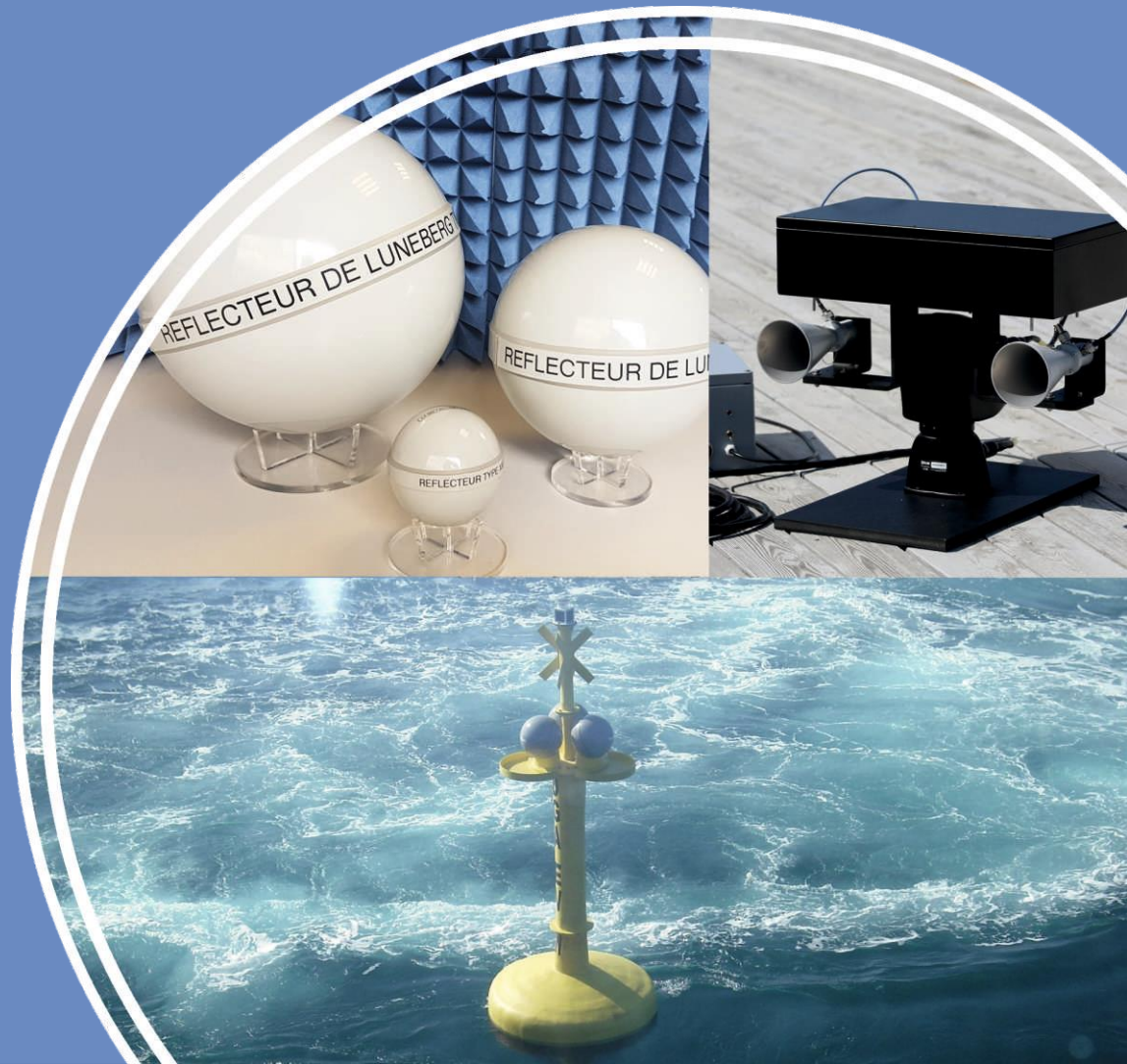


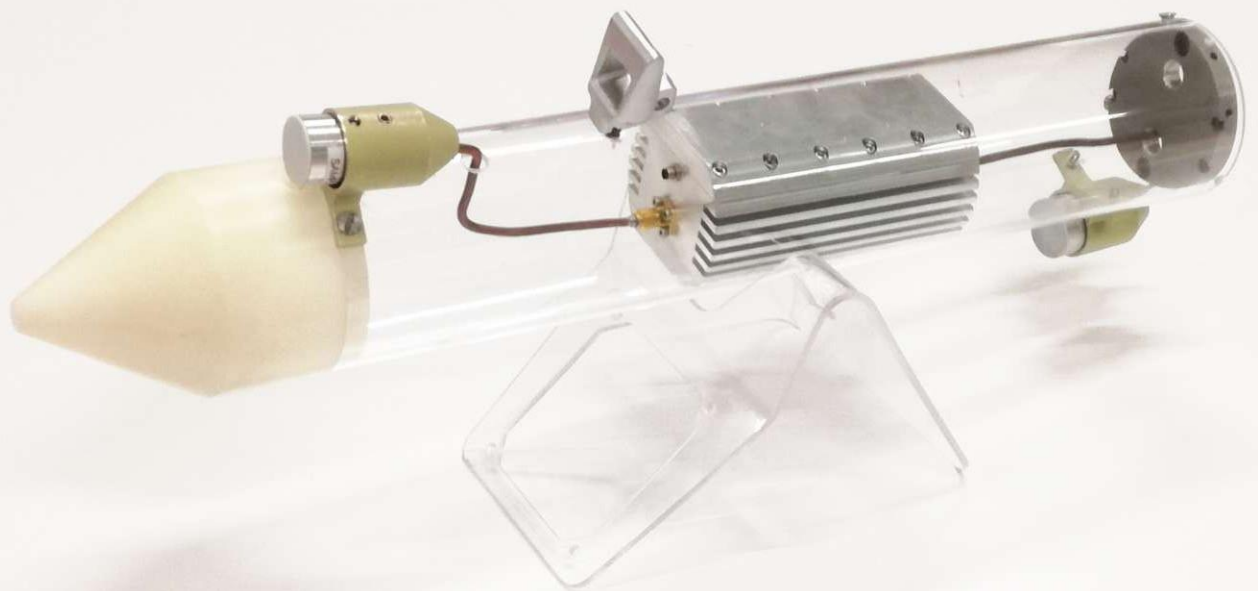
Lun'tech



NEW RADAR SOLUTIONS



**MAJOR PLAYER IN THE
PASSIVE AND ACTIVE
RADAR REFLECTOR MARKET**



ABOUT LUN'TECH

Located in the South of France, LUN'TECH has more than 40 years of expertise in developing and manufacturing products based on the Lüneberg lens principle - a sphere with progressive variations of permittivity - which has applications across the active and passive radar reflector and antenna market place.

Since 2007, LUN'TECH has expanded its range with new active radar reflectors for high fidelity simulation of realtargets.

To date, 12,000 radar reflectors are in service worldwide in more than 20 countries.

A subsidiary of the SECAPEM group since 2013, LUN'TECH has notably integrated its active radar reflectors in airborne targets and has continued to develop target systems and hyperfrequency electronic systems.

The products marketed by LUN'TECH meet the needs of both military and civil applications:

MILITARY

target tracking, real target simulation and radar calibration



CIVIL

satellite communication (multi-beam antennas), signalling of ships, buoys, obstacles, maritime and river markings and assistance to air navigation

WORLDWIDE PRESENCE

AMERICAS

Brazil - Canada

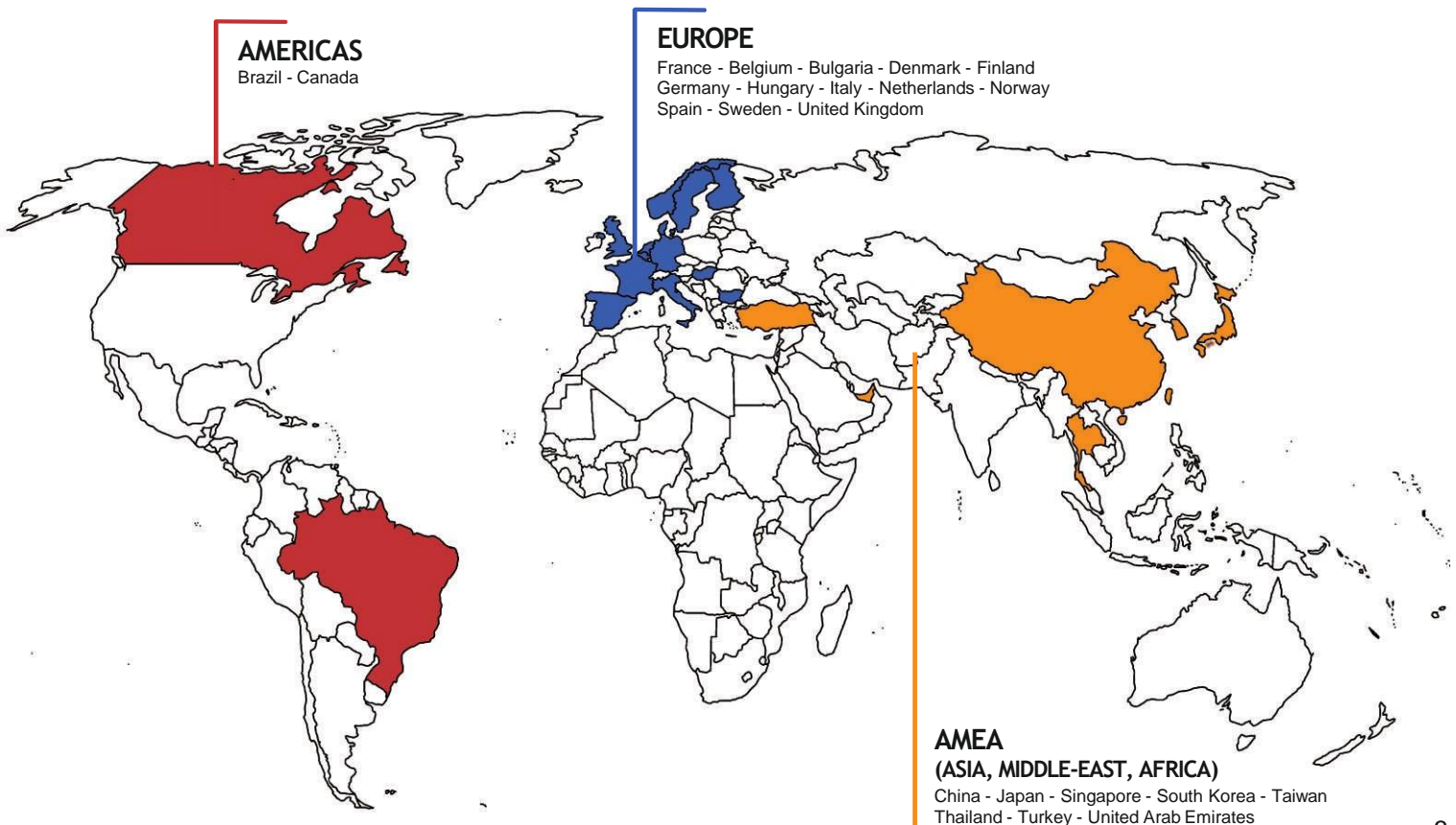
EUROPE

France - Belgium - Bulgaria - Denmark - Finland
Germany - Hungary - Italy - Netherlands - Norway
Spain - Sweden - United Kingdom

AMEA

(ASIA, MIDDLE-EAST, AFRICA)

China - Japan - Singapore - South Korea - Taiwan
Thailand - Turkey - United Arab Emirates



OUR PRODUCTS

THE LÜNEBERG LENS

The Lüneberg reflector is a sphere composed of concentric dielectric layers associated with a metal reflection zone and in a sealed container.

This device significantly increases the radar cross-sectional area, or RCS, of any system that has little or none. It is designed to provide a homogeneous response over a wide angle of interrogation.

MILITARY APPLICATIONS

This reflector is used to highlight targets for radar-guided missile training and can be integrated with towed or autonomous aerial targets.

For maritime targets, the reflectors can be fixed on floating buoys or platforms and amplify radar reflections.

In the context of calibration activities, this device can precisely identify the performance of the radar.

Monostatic rectilinear polarization

Monostatic circular polarization

Equatorial monostatic

Bistatic rectilinear polarization

Lüneberg reflector assembly

CIVIL APPLICATIONS

This technology also finds applications in the fields of satellite communication using multi-beam antennas, airports, maritime and river beacons, as well as air navigation assistance.

Simultaneous broadband links to multiple satellites

Permanent communication for land and sea vehicles



OUR PRODUCTS

TRIANGULAR CORNER RADAR REFLECTORS

The triangular corner radar reflectors are used to generate a particularly strong radar echo. The precision corner reflector is a particular interest for use in frequency bands in excess of 20Ghz.

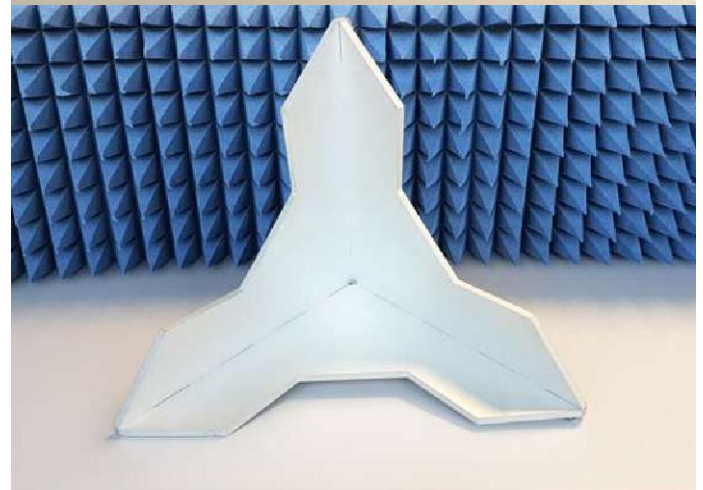
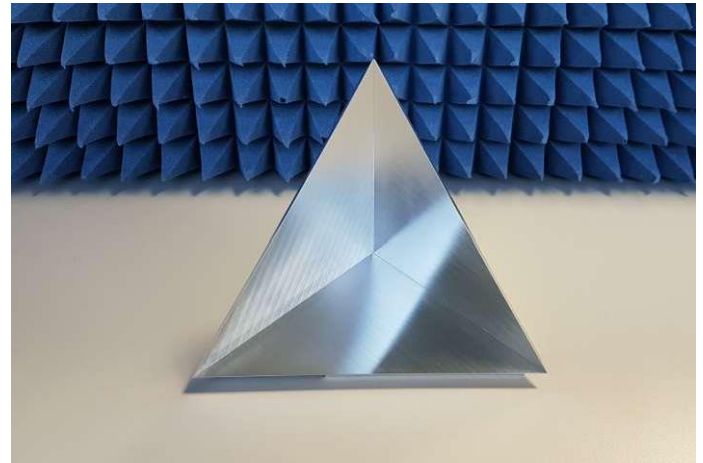
Particular attention is paid during the mechanical assembly of these triangular corner radar reflectors in order to ensure all faces are precisely positioned relative to each other.

LUN'TECH has obtained the exclusive worldwide license for the manufacture and sale of offset triangular corner radar reflectors developed by CNES (the French National Centre for Space Studies). The main advantage of this reflector is its more uniform response compared to that of a classic triangular corner radar reflector.

Triangular corner radar reflectors

Offset triangular corner radar reflectors

Precision triangular corner radar reflectors



ACTIVE RADAR REFLECTORS

LUNAM 218F Radar Reflector

Compact and lightweight, it is easily integrated into air, land and naval targets for military training in radar guided missile firing and radar calibration applications.

Target Simulator

The LUN'TECH autonomous radar target simulator provides high precision Doppler radar echoes. This system has many applications in the fields of security and radar surveillance in both civil and military spheres.

It can also be used in calibration, commissioning, training and certification activities of radar operators, as well as for critical examination of surveillance network design or acceptance trials.



OUR SERVICES

ANECHOID ROOM

We can provide customers with our in-house technical capabilities in order to test the performance of their equipment and systems.

We perform RCS measurements on all types of reflectors as well as antenna measurements (gain and radiation pattern). Our technical capabilities allow us to perform these measurements on frequencies between 4 and 40GHz.

**Modular measuring distance
between 6 and 17 meters**

Mounting on 4 axes

**Network analyzer, spectrum analyzer,
horn antennas**

INNOVATION & SERVICES

Our design office can respond to any type of requirement with tailor-made solutions, whether for a simple or a specific application.

We design systems that simulate all types of targets and we can calibrate a wide variety of radars.

Simulation

Evolution of existing products

Development of new products



SOME CUSTOMER REFERENCES



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COVER

Photo 1 : Lüneberg lenses © LUN'TECH
Photo 2 : Actif radar reflector TARGET SIMULATOR © LUN'TECH
Photo 3 : Buoy equipped with a beacon © DGA EV

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Photo 1 : Actif radar reflector LUNAM 218F © LUN'TECH

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Photo 1 : Lüneberg lenses © LUN'TECH

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Photo 1 and 2 : Lüneberg lenses © LUN'TECH
Photo 3 : Lüneberg reflectors assembly (tag) © LUN'TECH
Photo 4 : Lüneberg antenna XAR14 © LUN'TECH

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Photo 1 : Customized triangular corner radar reflector © LUN'TECH
Photo 2 : Offset triangular corner radar reflector © LUN'TECH
Photo 3 : Actif radar reflector LUNAM 218F © LUN'TECH
Photo 4 : Actif radar reflector TARGET SIMULATOR © LUN'TECH

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Photo 1 : Lüneberg lenses in an anechooid room © LUN'TECH
Photo 2 : Artificial soil plan of Limoges airport © LUN'TECH
Photo 3 : Special actif radar reflector assembly © LUN'TECH

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Photo 1 : Lüneberg lenses integrated with an aeral target MRSAT200 of Secapem © LUN'TECH





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