

# 2022 ELEDIA Call for Designs



## Antenna Design Competition Win 1500€!

You don't have to be an antenna expert to be a winner. Just send us your best design and it will be evaluated according to the competition rules!

Don't wait too long, though. The **deadline is October 31, 2022!**

Requirements for the **2022 ELEDIA Antenna Design Competition** include a circular RHCP/LHCP dual polarized antenna for wide scanning applications.

### Detailed Antenna Requirements

- Fractional Bandwidth (FBW)  $\geq 18\%$
- Polarization: Circular dual RHCP/LHCP
- Reflection Coefficient (S11):  $< -10$  dB in FBW
- Axial Ratio (AR):  $< 3$  dB in FBW, up to 60 deg from broadside
- Cross Polar Discrimination (XPD):  $> 10$  dB in FBW up to 60 deg from broadside
- Microstrip technology

### Submissions must include

- the antenna CAD model source file
- a report including at least
  - the description of the antenna (with drawings, dimensions, and materials)
  - the justification for the antenna selection
  - the antenna modeling procedure and simulation results

### Eligibility Conditions

The design must be compliant with all the antenna requirements.

### Competition Rules

The designs will be judged on

- antenna performance - 80%  
the more the antenna is performing, the higher the score
- antenna complexity - 20%  
the smaller/simpler the antenna, the higher the score

**Mandatory:** all the information necessary to reproduce the results must be included in the delivered report.

Send your entry to: [contact@eledia.com](mailto:contact@eledia.com)

In the subject line, add your **SURNAME Name** and the words  
**ELEDIA Call for Design - Antenna Design Competition**

**Non-Commercial Designs Only:** Antennas based on submitted designs must be the sole creations of the entrants and not available for sale.

**Judging:** All entries will be reviewed and those fitting the requirements will be evaluated. Winners will be chosen based on performance as predicted in modeling, as well as antenna complexity, and quality/completeness of results presentation.

**Prizes:** For the designs meeting the requirements:


**First-place** winner will receive checks in the amount of **1500 € + enrollment in the ELEDIA Talent Research Program (ETRP)** including a research advising program and the possibility to remotely access to the ELEDIA computational facilities.

**Second/Third-place** winners will receive a **free subscription token** to one of the 2022-2023 ELEDIA PhD Schools.

**Disclaimers:** By participating in the competition you are verifying that you are the owner and producer of the design and that no third-party ownership rights or patents apply to your design.

### Further Information

- [contact@eledia.org](mailto:contact@eledia.org)

In cooperation with 

More Information at: [www.eledia.org](http://www.eledia.org)