



DIMOFAC

# ARES Large surface printing platform for flexible electronics

cea

liten

## CEA IN A NUTSHELL

**Founded:** 1945

**Location:** Grenoble, France

**Technology:** Flexible Electronics

**Industry:** IoT, medical, packaging, automotive, smart homes, energy

**Website:** <https://www.cea-tech.fr/cea-tech/english/Pages/resources-and-skills/technology-platforms/large-area-printing-platform.aspx>



## ABOUT CEA

CEA Tech institute Liten covers the entire value chain, from formulating inks and enhancing the printing techniques (screen printing, slot-die, flexography, heliography) used on flexible materials like plastic, paper, and textiles through to layer characterization. The institute recently successfully produced photodetectors, transistors, and sensors (strain gauges) on a flexible plastic substrate.

## CEA PILOT LINE

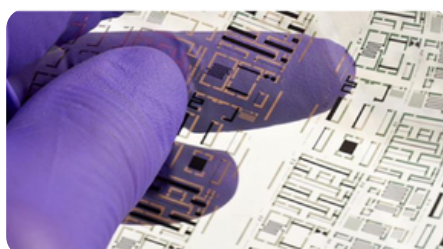
ARES (Large surface printing platform for flexible and hybrid electronics), led by CEA (FR), brings together all necessary advanced printing equipment – vacuum coating, screen printing, inkjet, gravure, flexography, thermoforming tools and slot-die, as well as back-end assembly tools (lamination, pick and place) in a 1000 m<sup>2</sup> Platform of clean room ISO7 class 10000.



Liten's printing techniques are compatible with large areas (up to 32 cm x 38 cm) and offer the added benefit of being able to develop 2D/3D smart objects functionalized using multiple electronic components on a myriad of substrates (from plastic and glass to paper and stretchable substrates). The electronic functions design can be customized according to the application. As an example, in IoT application, CEA offers technological building blocks such as antenna, sensors and chip bonding enabling the development of smart POC demonstrators able to communicate relevant data to a larger IT system.



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## SERVICES OFFERED

### ● Introduction to printed and hybrid electronics

Introduction to printed and hybrid electronics - 1/2 day training - Overview / Advantages - Manufacturing Process - Technologies portfolio - Applications/ several exemples of Prototypes - Visit of the facilities (clean room). Additional ½ day: The visit might be coupled with a identification of R&D relevant subjects with the visitors.

## BENEFITS

- Introduction of functionality in the product for smart and/or traceability applications

## VALUE PER SERVICE



- Pricing via specific offer/quote, depending on the audience / number of attendees and technical level