eolane

French leader in professional electronic services and solutions

March 2022

www.eolane.com

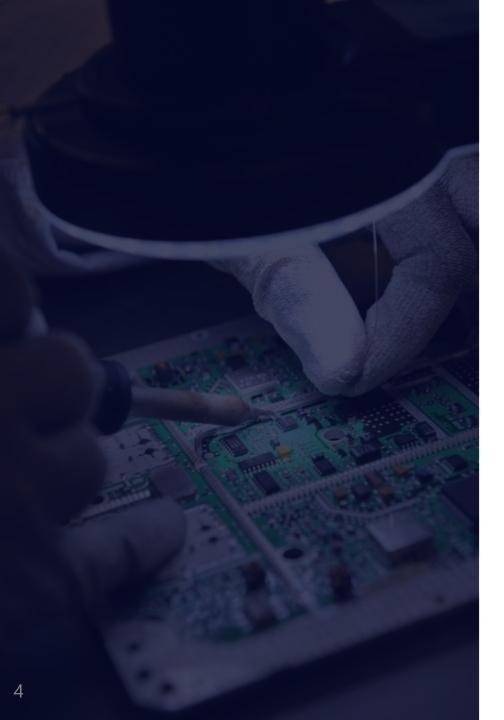
Our Group

- We are an EMS (Electronic Manufacturer Services), designer, manufacturer, producer and maintainer of electronic assemblies and sub-assemblies
- Our profession is the design of advanced electronic PCBA produced in small, medium and large series, and their integration into a final product, whether they are Institutional Customers, Large Groups International or Start Up.
- ✓ With 2,400 employees including 200 R&D engineers, we combine research and development capacity with high industrial performance.





éolane Key figures



éolane in numbers

290

M€ of

Turnover

1 300

Employees in France

1 100

International employees

700

Customers

12

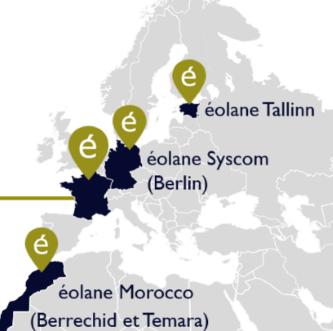
Production sites

150

R&D Engineers









France

- West France (Douarnenez [1])
- Center France
 (Angers [2] et Combrée [3])
- East France (Neuilly-En-Thelle [4], Saint-Agrève [5] et Valence [6])

A presence on 3 continents

8 main markets 2020

21%

6%



Defense – Naval – Civil Security

29%



Medical – Health Well being

11%



Automotive – Rolling Stock



Energies -Natural resources



Industry – 16%
Industrial equipment



4%

Telecoms MultiMedia



Railway– Public Transport



Civil Aeronautics 2
- Spatial

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13 certifications



























* Certification In Progress





éolane Services et Solutions

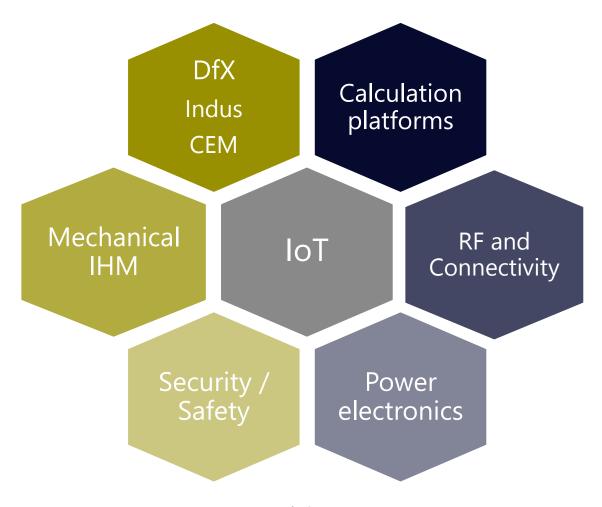
A full range of services and solutions





Our expertise – Our experts







Specification and design of your products



Application / expertise areas

- Embedded systems
- Motor control
- Battery management
- Energy conversion
- Artificial intelligence
- HMI (Mechanics, Graphics, UX Design)
- Feasibility study, modelling (Proof Of Concept)
- Test benches, harness design

System

- Definition of needs
- Functional analysis
- Architecture / modelling
- Tooled traceability matrix
- Severe environments
- Dependability
- Numerical simulation (thermal, mechanical, ...)
- EMC

Electronic

- Analogical: weak signal and precision measurements
- Power: converters and motors
- High tension
- RF: Wife, Bluetooth, Lora, Sigfox ...
- Digital: processors, microcontrollers and FPGA
- Lighting for power LED
- Industrial-oriented design, DFx

Software

- UML modelling
- Embedded software
- Real-time cores
- Embedded Linux
- Boot loader, BSI
- Signal processing
- Fieldbus & associated protocols
- Human Machine Interface
- Cloud micro service
- Mobile apps
- Industrialization & maintenance oriented design, DFx

Mechanic

- Form design, ergonomics
- Quick Mock-up
- Choice of materials & processes (plastics, sheet metal, machining, foundry...)
- Tooled design
- Finite element calculation
- Complex integration
- Industrial-oriented design, DFx

A specification and design process according to each market rules ISO 9001, IATF, ISO 13485, CMMI IvI2, HIS ASPICE IvI 2, ATEX; IEC 61508 SIL2, DO DAL-C, EN 50126, ISO 26262 ASIL-B



CEM and radio expertise and support

QUALIFICATION by éolane



Anechoic Chamber Size 7m x 4m x 3,3m



Measurement Receiver ESW26

Allowing 100x faster measurement than a classic receiver!

- CEM and Radio expertise and support
- Emission test
 - CEM and Radio Qualification
 - CE Marking (Railway, Medical, IoT)
 - Emission measurements in automotive, military, aeronautics...
 - ISO 17025 Certification
 - Immunity tests



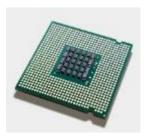
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The **Sourcing** of your components



Membrane Switch

EMS Active components



PCB







OLED, touch Panel)

LCD / LCM



(incl.



EMS Passive components



Métal / Plastic products



Power Adapter











Industrialization Design for Excellence (Dfx)

Purchase list optimization – Design for BOM

- Equivalences search double sources
- Sustainability analysis
- Optimal component identification supplier couple in order to secure the production activity

Test strategy definition — Design for Test

- Forecast test strategy
- Test Coverage Analysis (TestWay / Expert test Technomatix)
- Structural test Functional test Counter-proposals of test strategy

Product / Process couple optimization – Design for Manufacturing

- Smart Industry
- Lean Manufacturing approach



Support you in the production of your products



Electronic PCBA

- Nearly a billion components installed per year
- From the standard IPC A610 Class 3 card
- Miniaturization High density PCBA
- Selective soldering, Varnishing, Resining,
- From small series & low recurrence to large series
- Chip On Board
- Laser marking

Integration - Mechatronics

- Mechanical Assembly (Screwing, Clipping, Gluing, Assembly, Marking, Resining)
- Micromechanics
- Power Chest
- Command bay

Wiring

- Wired wiring
- Wrapping
- Stranded
- Harness

Test

- Debugging
- X-ray, Automatic inspection system
- Structural test, Functional test
- CEM laboratory, Radio...





Support

Maintenance in Operational Condition

Sustainability

 Obsolescence Management (hardware and Software)

Repair

- Long-term storage of electronic components
- After-sales services

Logistic

Fleet management and inventory regeneration

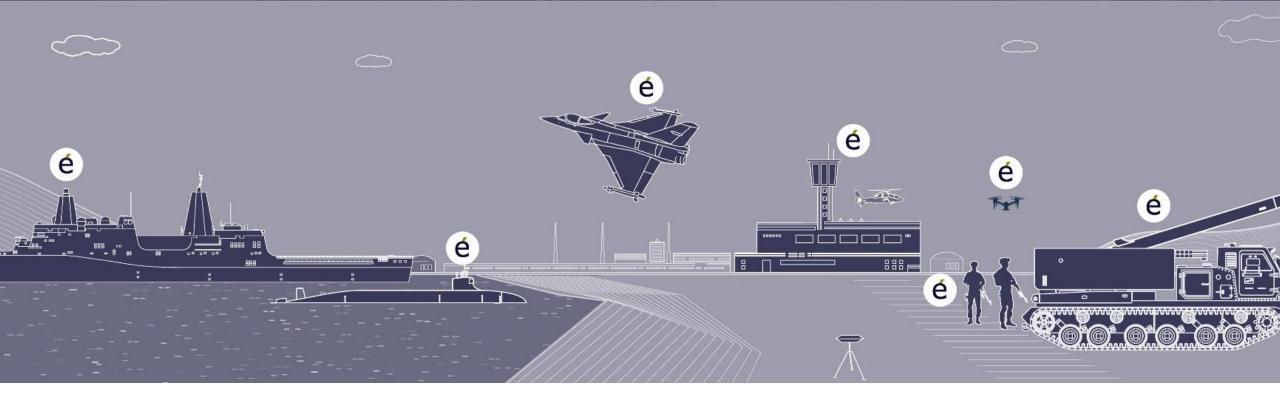




Market know-how

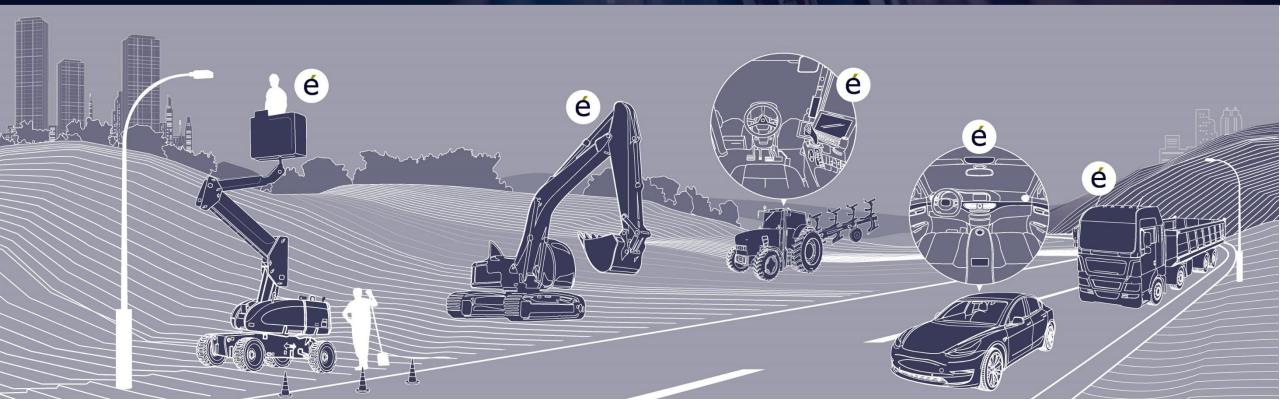
#eolaneinside

Defense – Naval – Civil Security #eolaneinside





Automotive – Rolling machines #eolaneinside





Industry – Telecom Multimedia #eolaneinside



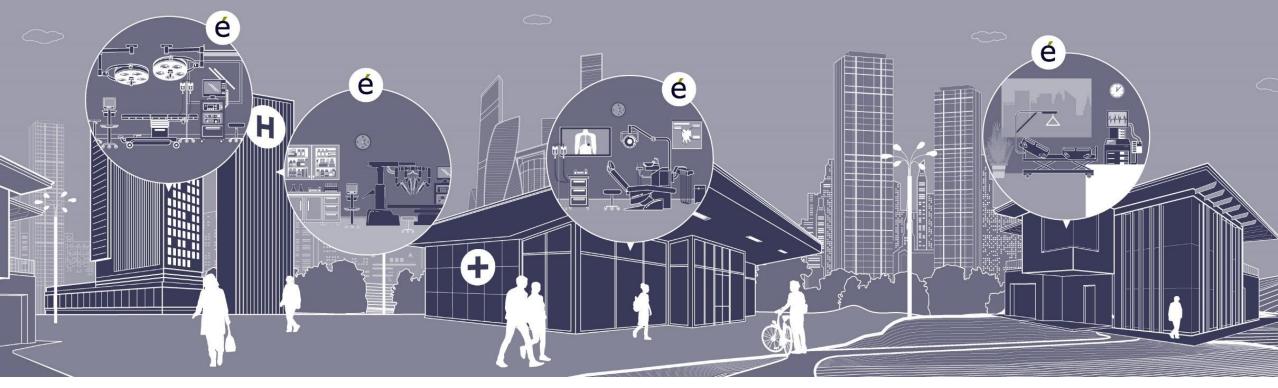


Railway – Public Transport #eolaneinside





Medical – Health Well being #eolaneinside





Energies – Natural resources #eolaneinside





Civil Aeronautics – Spatial #eolaneinside







Contact us



Defense – Naval – Civil Security



Civil Aeronautics
- Spatial

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Railway– Public Transport

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Industry – Industrial equipment



Telecoms Multimedia



Energies Natural resources



Medical – Health Well being

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Our references / market







































ALSTOM















