

R-PODID aims to develop an automated, cloudless, short-term fault-prediction for electric drives, power modules, and power devices, that can be integrated into power converters.

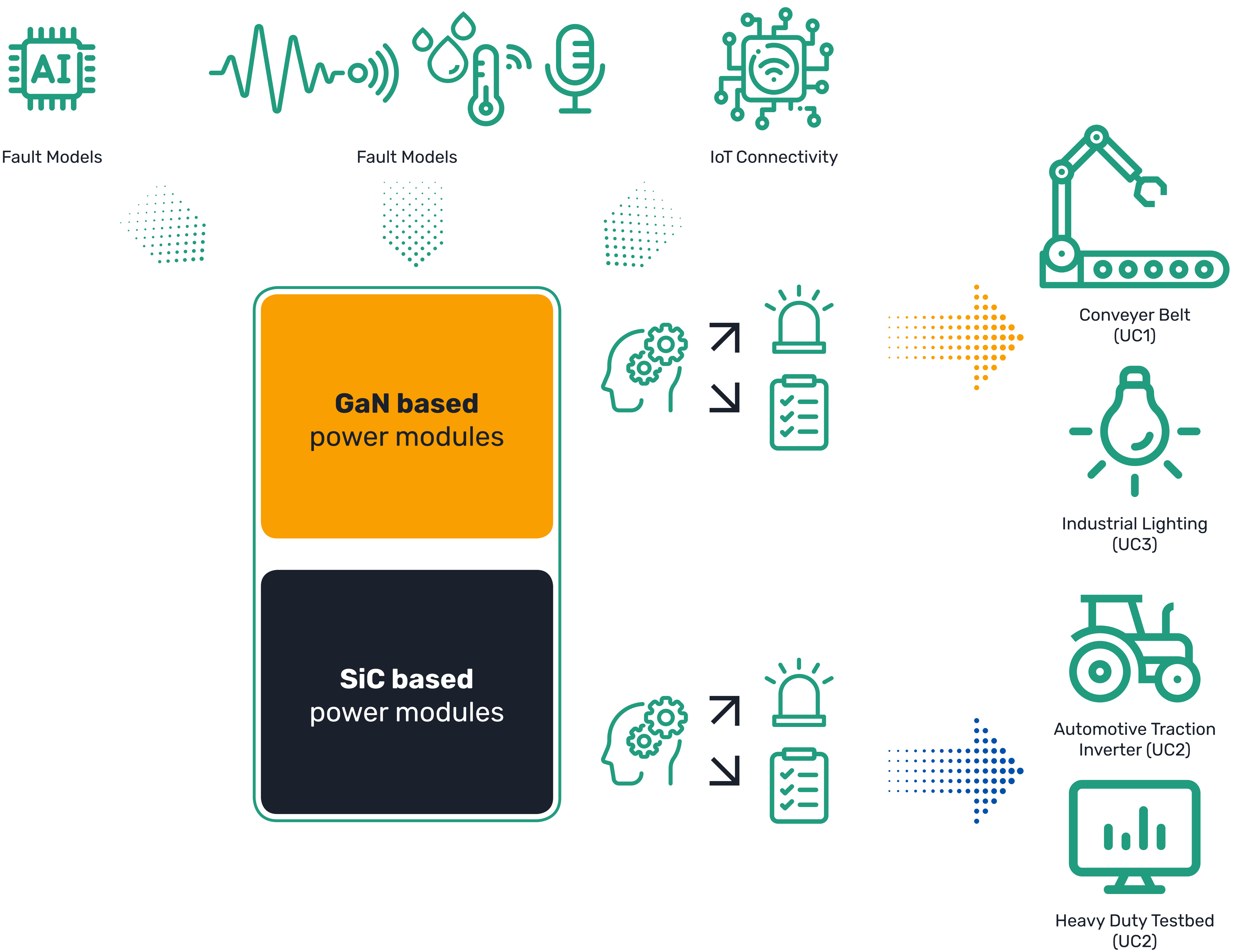


**Duration:** 36 months  
**Start and end date:** 2023 09 01 – 2026 08 31  
**Coordinator:** University of Bologna  
**Number of partners:** 33  
**Total budget:** € 23.7M  
**EU budget contribution:** € 7.2M

### R-PODID OBJECTIVES:

- Methodology for fault-prediction model generation from sparse training sets or system simulation
- Power electronics with integrated support for embedded AI
- 24 h fault-prediction for Gallium Nitride (GaN) and Silicon Carbide (SiC) based power converters
- 24 h fault-prediction and fault mitigation for electric drives
- Sensors for reliability prediction in power modules

### Innovations within R-PODID are implemented into the power modules and applied in the four use cases:



### PARTNERS:



### ACKNOWLEDGMENT:



R-PODID is supported by the Chips Joint Undertaking and its members, including the top-up funding by National Authorities of Italy, Turkey, Portugal, The Netherlands, Czech Republic, Latvia, Greece, and Romania under grant agreement n° 101112338. Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the granting authority. Neither the European Union nor the granting authority can be held responsible for them.