



Augmented RFID product line enables wireless passive sensing for Green IoT

em|aura-sense allows sustainable and eco-friendly batteryless capacitive sensing powered by your existing RAIN RFID infrastructure

USERS

- Process optimization
- Increasing operational efficiency
- Lean manufacturing
- Control logistics

RAIN RFID-Sensor

- Snapshot Sensor Standard Protocol
- Battery-free tags
- Low cost capacitive sensing solutions
- RAIN RFID Reader Standard commands

Benefits to system integrators

- Uses standard RAIN RFID protocol (ISO/IEC 18000-63), no custom commands needed.
- Fully batteryless passive RFID technology, enabling sustainable green tag deployments with no maintenance and minimum CO₂ footprint.
- Measurements initiated by reader polling, no need for network synchronization.

The EPC™ Gen2v2 compliant em|aura-sense tag IC enables a new class of passive wireless sensor tags, including the new Snapshot Sensor Standard Protocol.

em|aura-sense tag IC includes a capacitive sensing interface enabling a wide number of applications, from proximity and presence detection to pressure, humidity, and more.

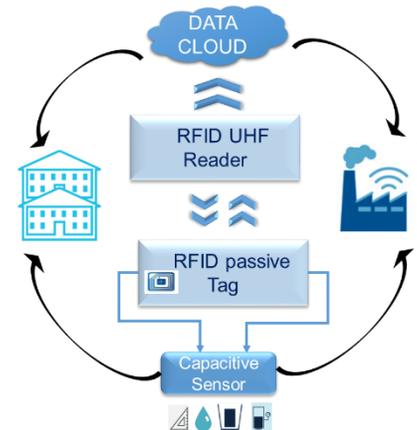
Benefits to end users

- This wireless, batteryless and maintenance-free sensing solution paves the way for ubiquitous sustainable and eco-friendly sensor deployments.
- New opportunities for process optimization, increasing operational efficiency and lean manufacturing in markets such as automotive industry, construction, energy and healthcare.



Benefits to tag manufacturers

- em|aura-sense required no physical link between the sensor and the reader.
- Read-out through hand-held readers, no installation cost.
- Eliminates wires and enables seamless installation, just “place it and leave it”.



EM Microelectronic, a company of the Swatch Group, is a leading Swiss innovator serving the RFID market for 30 years with standard and custom, passive, active and semi-active ICs covering all frequency ranges: LF, HF, UHF and 2.4 GHz. EM has pioneered the adoption of UHF RFID in retail, with the first mass deployments in the early 2000's, paving the way for the emergence of RAIN RFID, and continues to drive new applications with its em|aura-sense family, adding passive sensing capabilities on top of RAIN RFID, enabling Green IoT.