

Self-Powered Liquid Detection Sensor

From Factory equipment to Medical machines: Reliability Matters in Battery-Free Liquid Detection



- No electrical wire is required
- A few drops of water can generate power

Applications

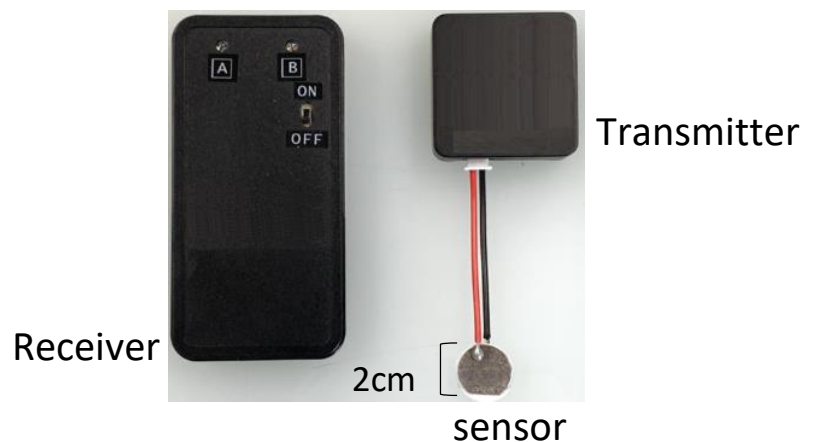
- Medical Application
- Analysis Equipment
- Industrial Use
- Nursing-care Field



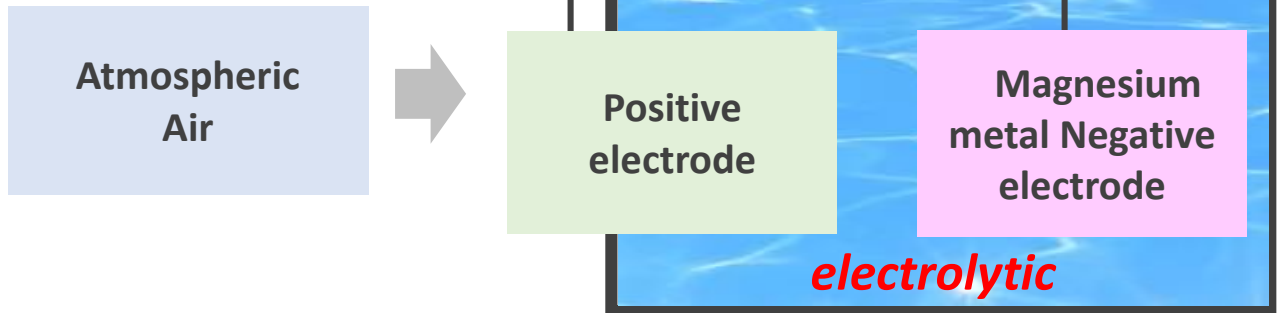
Sensor image



Standard size



Principle



- Medical Use - Concept

Blood Leakage or Medicine Leakage on Medical site
Considerations for Diapers nursing Babies or Adults

- Non-Medical Use -

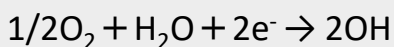
Water Leak Detection that could be serious incidents for buildings, pipes, or all kinds of machineries or equipment.

■ ■ Electrochemical reactions ■ ■

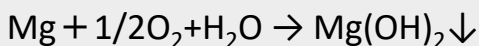
【Anode】



【Cathode】



【Overall reaction】



The sensor produces electricity through an electrochemical reaction with magnesium, using the target liquid as the electrolyte.

< Contact >



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Founded: 1901

Sales: \$281 million US dollar (2023 March, consolidated)
ISO certified: 9001, 14001, 13485