EV31100, Swine Monitoring Evaluation Kit
Cloud Based System for Monitoring Swine Activity & Body Temperature

Movella
Bringing meaning to movement

- The kit allows user to evaluate world's first Cloud based swine health monitoring system
- Ideal for research and getting to know the system before mass deployment at large scale
- Easy monitoring and operation using smartphone (iOS, Android) app or Cloud

Care for Swine:

- This system can detect serious illnesses by monitoring and tracking changes in activity level and body temperature of the animal
- Fully automated health monitoring around the clock (24/7/365).
- Easy setup and installation in any barn environment
- Easy to read charts on animal behavior and temperature
- Alert mechanism to alarm any abnormal behavior or temperature
- Early disease detection to reduce feed, labor, medication, and veterinarian costs

System Features & Topology

- System components:
    - Tracker, gateway, dashboard software (mobile/desktop), SaaS license
- AI-based embedded algorithms to detect animal behavior:
    - Resting (lying, min movement)
    - Active (walking, standing)
    - Feeding (eating, drinking)

Tracker | BLE Connectivity | Gateway | Wi-Fi Connectivity | Web Portal

- Animal reference temperature
- Onboard LED to identify a specific animal(s) among others
- Each gateway can support up to 100 trackers
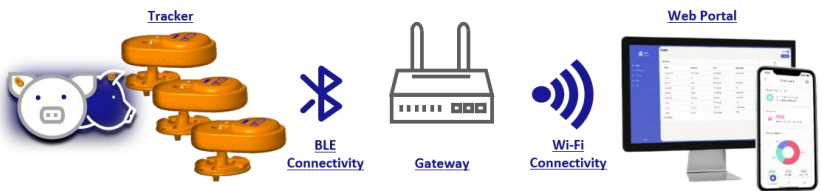
Tracker Technical Specifications

Dimensions	48 x 30 x 12.7 mm (LxWxH)
Weight	15 ± 1g
Battery	1 pre-installed CR2032 coin battery (min. 1 year service life)
Connectivity	BLE 5.0
Temperature sensor accuracy	±0.5°C
Offline data storage capacity	14 days (Basic activity & body temperature data)
Data transmission frequency	Once every 30 minutes
Waterproof level	IP67
Operating temperature	-10 °C to +55 °C

Gateway, Applicator, and Cloud Specifications

Gateway	
Dimensions	60 x 60 x 22 mm (LxWxH)
Weight	58g (with antenna)
Power Supply	5.0V, USB connection (USB cable is provided)
Connectivity	BLE 5.0 to Tracker & WiFi to cloud or local server
Waterproof level	Not supported (under consideration for next model)
Operating temperature	-40 °C to +85 °C
Applicator	
Dimensions	250 x 65 x 25 mm (LxWxH)
Weight	327g
Cloud Service	
Monthly Cloud Service	Requires minimum of 1-year subscription

EV31100, Swine Monitoring Evaluation Kit
Cloud Based System for Monitoring Swine Activity & Body Temperature

Movella
Bringing meaning to movement

Kit Content

Device	Marketing Part #	Orderable Part #
30 x Tracker (electronics, male post, silicon washer)	MM31100	Contact Movella for orderable part #
1 x Gateway	MA3112F0	Contact Movella for orderable part #
1 x Tracker applicator	MA3110C0	Contact Movella for orderable part #
1 x Magnet (for enabling the tracker for the first time)	MA3111S0	MA3111S0
1-year SaaS model license	Included	NA
1-year cloud service	Included	NA
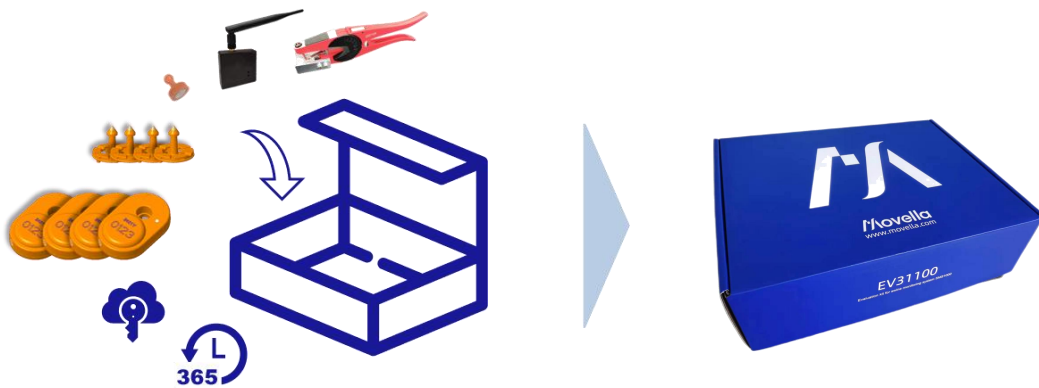
Supporting Documents

Related Device	Document Type	Document #
EV31100 (Evaluation Kit)	Application note	ANM-020-0019
MM31100 (Animal Tracker)	User manual	UGM-020-0015
MA3112F0 (Gateway)	Application note	ANM-020-0013
IAM Web Portal & Mobile App	User manual	UGM-020-0016

For more info visit us at: https://www.xsens.com/intelligent-animal-monitoring

About Movella

Movella™ is a full-stack hardware, software and data analysis company. Capture motion data and turn it into meaningful and actionable insights. Monitor, capture and analyze all aspects of sports. Cooperate with global leading brands such as EA, NBC Universal, Daimler, Siemens and more than 500 sports teams.
Our mission is to make people realize the meaning of movement and make positive changes by digitizing movement. Products accelerate the innovation of entertainment, sports, health and industrial and agricultural markets. We have a wide range of customers, but all products and services are focusing on capturing and analyzing movement.