

Location: Spain

Milesight Partner
Monolitic
Ixorigue

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Spain

Deployed Products:
SG50*300

Applications
Infrastructure Management

Background

The livestock industry faces growing demands for efficiency, sustainability, and animal welfare. To address this, Ixorigue, a smart livestock management company, worked with our partner Monolitic to enhance cattle tracking and health monitoring. At the core of the project is the Milesight SG50 Solar LoRaWAN® Gateway, providing reliable connectivity in remote farms and enabling seamless real-time data transmission from cattle collars to the cloud.



Challenges



Reliable Connectivity

A robust gateway was essential to ensure uninterrupted data transmission in rural areas without wired power.



Real-Time Monitoring

Farmers required instant updates and WhatsApp alerts for critical events such as calving or injuries.



Rugged Deployment

Equipment had to withstand harsh outdoor conditions while operating autonomously on solar power.

Solution

A major obstacle is the lack of reliable connectivity to ensure continuous data transmission. Without stable links between tracking devices and the management platform, it is difficult to obtain accurate information.



The Milesight SG50 Solar-Powered LoRaWAN® Gateway addresses this need with a built-in rechargeable battery and solar panel, providing up to 4 days of operation without sunlight. It supports cellular backhaul and is compatible with mainstream network servers. Designed for wireless deployment, SG50 can operate independently in harsh environments. Acting as a communication bridge, it gathers data from multiple sensors and transmits it to the cloud via cellular or Ethernet. With a high-performance processor and LoRaWAN® technology, it ensures robust and efficient large-scale networking, even in rural areas with limited cellular coverage.



Results

The deployment of Milesight's SG50 Solar-Powered LoRaWAN® Gateway has brought reliable connectivity and efficiency to livestock operations:

Continuous Data Collection

Solar power and a high-capacity battery ensured uninterrupted monitoring for up to 4 days without sunlight, keeping livestock data flowing even in harsh weather.

Enhanced Reliability in the Field

With IP67 protection and wide temperature tolerance, the gateway operated stably in dusty, wet, and extreme farm conditions.

Scalable Farm Connectivity

Each gateway managed over 2,000 end nodes, enabling seamless integration of sensors across large-scale livestock networks.

Reduced Maintenance Costs

Remote monitoring and easy deployment minimized the need for on-site intervention, cutting labor time and improving efficiency.

Why Choose Milesight



Milesight delivers reliable IoT solutions powered by LoRaWAN®, featuring long-range coverage, low power consumption, and high scalability. The Milesight SG50 Solar-Powered LoRaWAN® Gateway is robust and designed with solar and battery backup to ensure continuous operation, even in remote or challenging environments. With simple deployment, remote management, and open compatibility, Milesight is the ideal choice for building smart, sustainable, and efficient operations.



Milesight Partner



About Monolitic

Monolitic is a company with more than 40 years of experience in the Spanish industrial market. Experts in distribution and provision of specialized technological solutions, focused on connected hardware. It is distinguished by its focus on customized solutions and exceptional service that adapts to the most demanding needs of the sector.



About Ixorigue

We digitize livestock farms with the goal of improving farmers' quality of life and profitability.