



Solar Fence IoT Monitoring System

Know the moment your electric fence stops protecting you. Wireless sensing nodes watch every stretch of the perimeter and report faults to your phone — no daily patrols, no guesswork.

LIVE FENCE STATUS

● N1 – N6 · Pulse OK

● **N7 · Voltage drop**
Possible short / vegetation contact

● N8 – N10 · Pulse OK



500–750 m

One wireless node per segment pinpoints the fault



Zero cabling

RF wireless nodes — no trenching across fields, roads or plant areas



4G + Cloud

Status and alerts on desktop, laptop or mobile, from anywhere

 Farms & plantations

 Remote industries

 Wildlife-conflict zones



Solar fences fail silently. Intruders notice before you do.

Remote industries and farmlands rely on solar electric fencing to keep out intruders, unwanted visitors and wild animals. The fence delivers very short, high-voltage pulses — a sharp, deterrent shock that is designed not to cause lasting harm.

But a fence only deters while it is energised end to end. Falling trees, creepers climbing poles and wires, and animals caught in the strands can short, earth or break the line. A single fault can drag down the voltage along a long section — and nothing tells you it has happened.

Keeping a long perimeter healthy has meant walking it on a daily or regular basis. On a 10 km boundary that is slow, costly, and still leaves hours of exposure between inspections.

WHAT TAKES A FENCE DOWN



Fallen trees & branches

Short the wires or snap strands after storms



Creepers & vegetation

Grow along poles and wires, leaking current to earth



Animals trapped

Entangled animals stretch, short or break the line



Wire breaks & tampering

Open circuits leave whole sections unprotected

THE SOLUTION

Continuous, wireless health monitoring for the entire fence

Sensing nodes installed along the fence watch the high-voltage pulses, detect anomalies and report them wirelessly. An IoT gateway carries every node's status to the cloud over 4G, so your operations team or the farmer can see which segment has a problem and go straight to it.



Low fence voltage

Pulse amplitude falling below a healthy level along a segment



Short / earth leakage

Vegetation, fallen trees or trapped animals loading the line



Open circuit

Broken or cut wire — pulses no longer reach the segment



Energiser off

No pulses anywhere: energiser, battery or solar supply issue



Node offline

A sensing node stops reporting — flagged for attention



Fault location

Alert names the node, narrowing the search to one segment



Manual patrols

- Daily walks along kilometres of fence
- Faults found hours or days late
- Whole perimeter searched to find one problem
- No record of when or how often faults occur



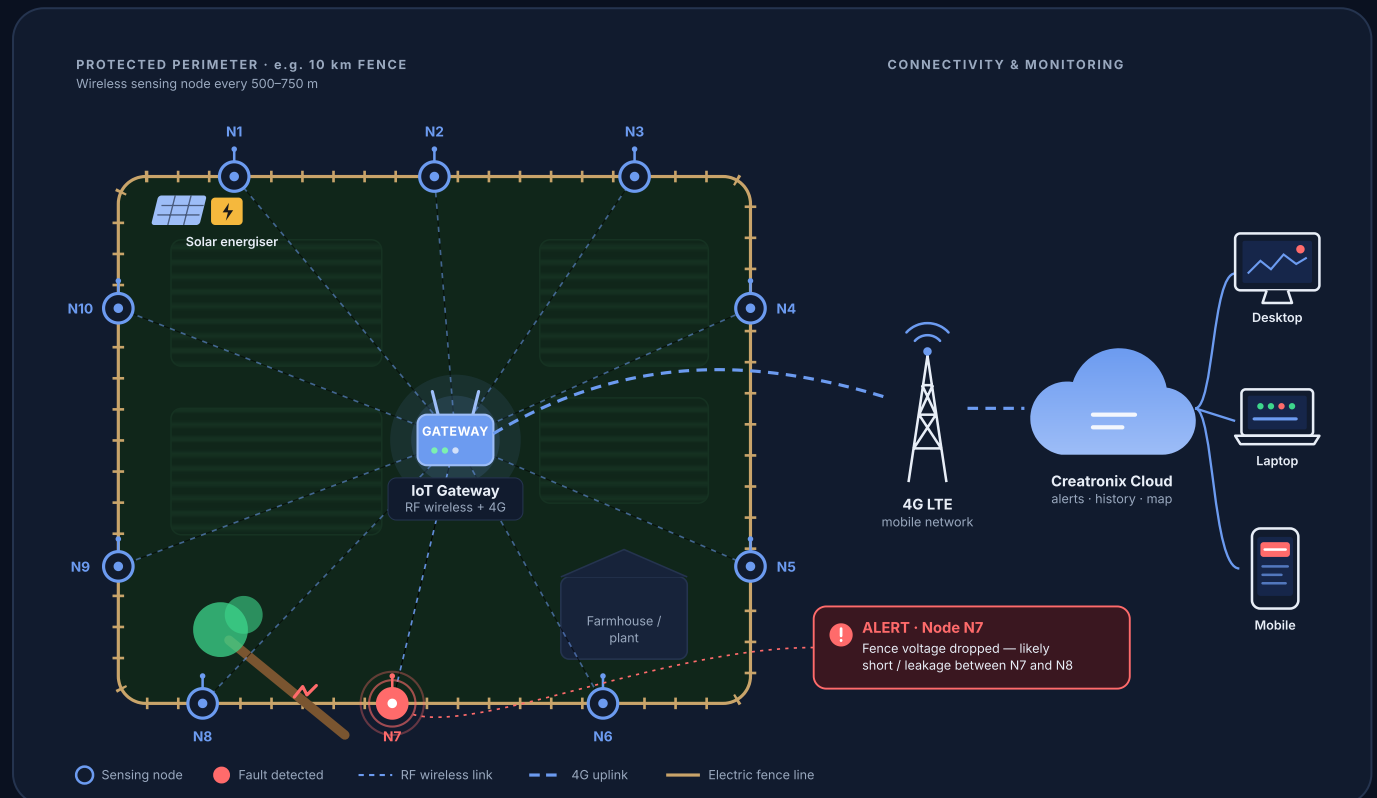
With IoT monitoring

- Fence health visible around the clock
- Alerts as soon as an anomaly is detected
- Team goes straight to the affected segment
- Fault history to plan vegetation clearing



From fence wire to your phone — in four steps

Sensing nodes are placed along the fence — for example every 500 to 750 m on a 10 km perimeter. Every node communicates directly with one IoT gateway over RF wireless. The gateway uses 4G to reach Creatronix Cloud, where status and alerts can be viewed on a desktop, laptop or mobile.

**01****Sense**

Each node monitors the fence pulses on its segment and looks for anomalies.

02**Transmit**

Nodes report wirelessly over RF straight to the IoT gateway — no field cabling.

03**Connect**

The gateway relays all node data over 4G LTE to Creatronix Cloud.

04**Act**

Teams see the faulty segment on screen and dispatch someone to fix it.

Monitoring dashboard

Illustrative view · desktop, laptop & mobile

FENCE SEGMENTS**N1** **N2** **N3** **N4** **N5** **N6** **N7** **N8** **N9** **N10****9 / 10**

Segments healthy

1

Active alert

10 / 10

Nodes online

RECENT EVENTS06:42 **N7** · Fence voltage low — check N7-N806:15 **N3** · Voltage restored after clearingYday **All** · Energiser pulses normal



Three parts. One complete view of your perimeter.

Fence Sensing Node Mounted along the fence line

- Monitors fence pulses on its segment
- Detects low voltage, shorts, leakage and open circuits
- RF wireless link direct to the gateway
- Weather-resistant outdoor enclosure
- Clamp-on install; no trenching

IoT Gateway One per site

- Receives data from all sensing nodes over RF
- Built-in 4G LTE uplink to the cloud
- Manages the entire wireless fence network
- Reports node health and connectivity
- Ideal for sites without wired internet

Creatronix Cloud Web & mobile access

- Live status of every fence segment
- Instant alerts with node location
- Fault and event history
- Multi-user access for owners and ops teams
- View on desktop, laptop or mobile

Where it fits

 **Farmlands & orchards**

 **Plantations & estates**

 **Remote industrial sites**

 **Solar & utility plants**

 **Warehouses & yards**

 **Wildlife-border villages**

Example deployment · 10 km perimeter

Node spacing	Every 500 – 750 m
Sensing nodes	Approx. 14 – 20
IoT gateway	1 per site
Node → gateway	RF wireless, direct
Gateway → cloud	4G LTE
Access	Desktop, laptop, mobile

Indicative. Node count and placement are finalised after a site survey.

**Stop walking the fence.
Start watching it.**

Request a site assessment or product demonstration.

 info@creatronix.in

 www.creatronix.in