



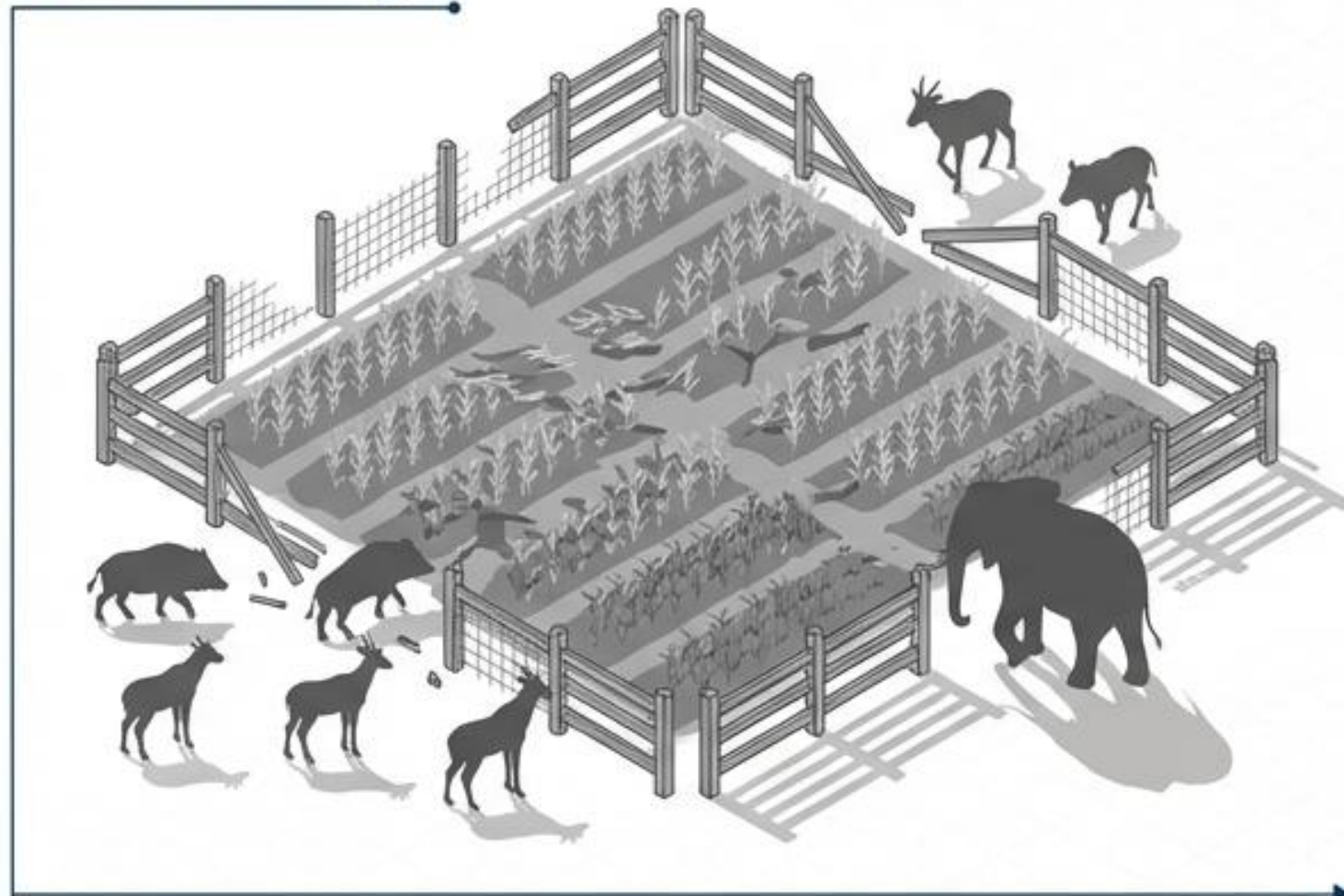
The Modern Farm Blueprint

Advanced Solar Exclusion Fencing &
Holistic Crop Management Systems

Engineered for scale. Built for sustainability. A comprehensive technical guide to the Omnis 150-Bigha infrastructure ecosystem.

The Dual Mandate of Modern Agriculture

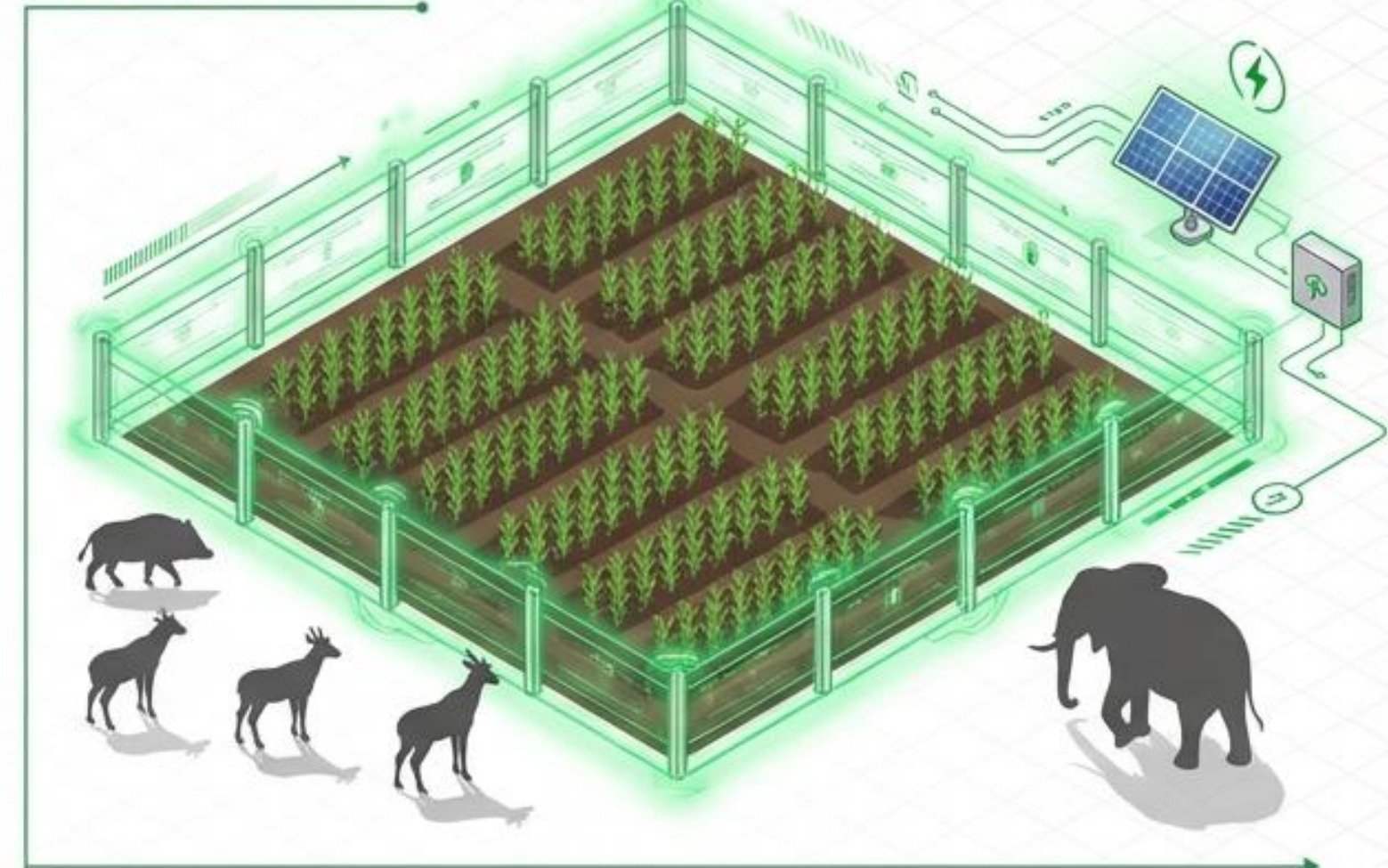
The Challenge



The Threat Profile

Relentless wildlife intrusion causes devastating yield losses. Traditional physical barriers are labor-intensive, easily breached, and expensive to maintain over vast acreages.

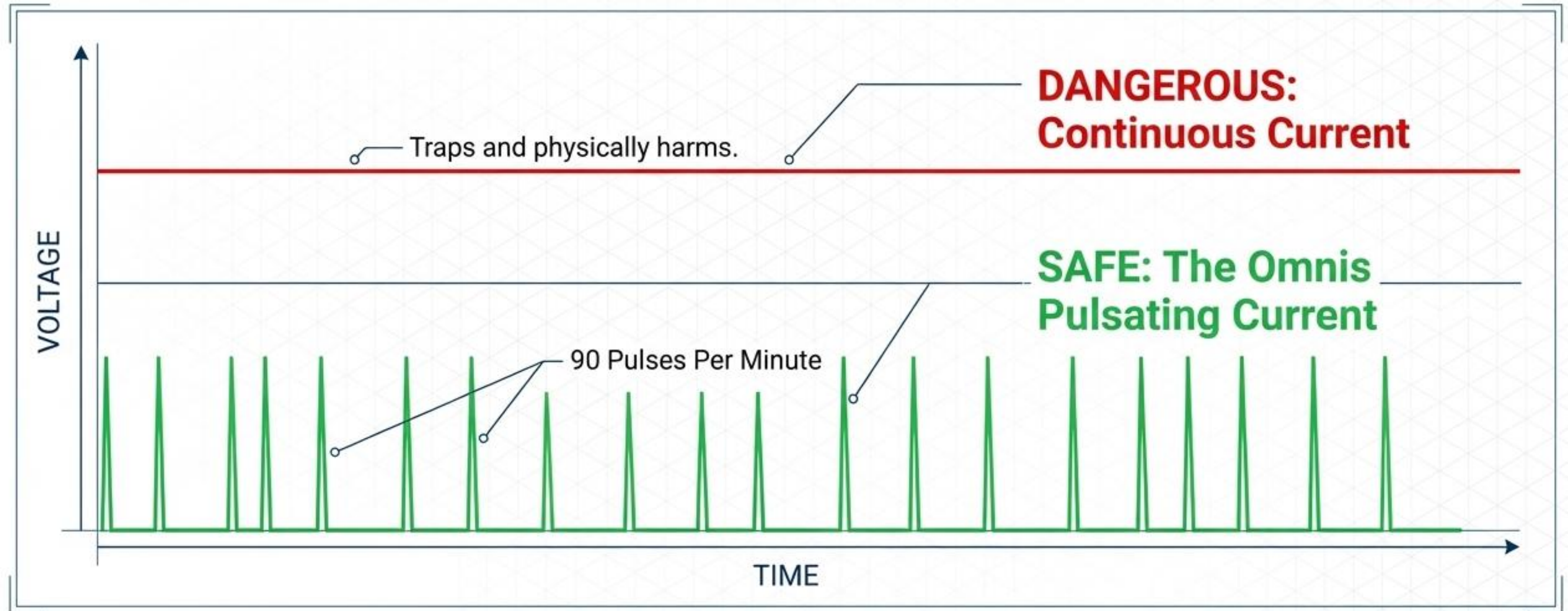
The Mandate



The Omnis Solution

Off-grid, automated perimeter security. Harnessing solar architecture to deliver high-voltage, non-lethal deterrence that protects crops, preserves wildlife, and operates entirely independently of erratic local power grids.

The Science of the 'Zatka' Pulse: Maximum Deterrence, Zero Fatalities



Mechanism of Action

The system does not emit a continuous stream of electricity. Instead, it generates a high-voltage pulsating current—flashing on and off 90 times per minute.

The Psychological Barrier

Upon contact, the animal receives a sharp, terrifying shock triggering an immediate flight response. Because the current breaks instantly, the animal is never physically trapped or fatally harmed. It trains local wildlife to permanently avoid the perimeter.

The Command Center: Omnis 15 KVA Zatka Machine

Coverage Capacity

Rated for massive commercial plots up to 150 Bigha (approx. 50 Acres).

Quality Assurance

ISO 9001:2015 Certified manufacturing for heavy-duty agricultural use.



Digital Diagnostics

Integrated Battery Volt digital display for real-time system monitoring.

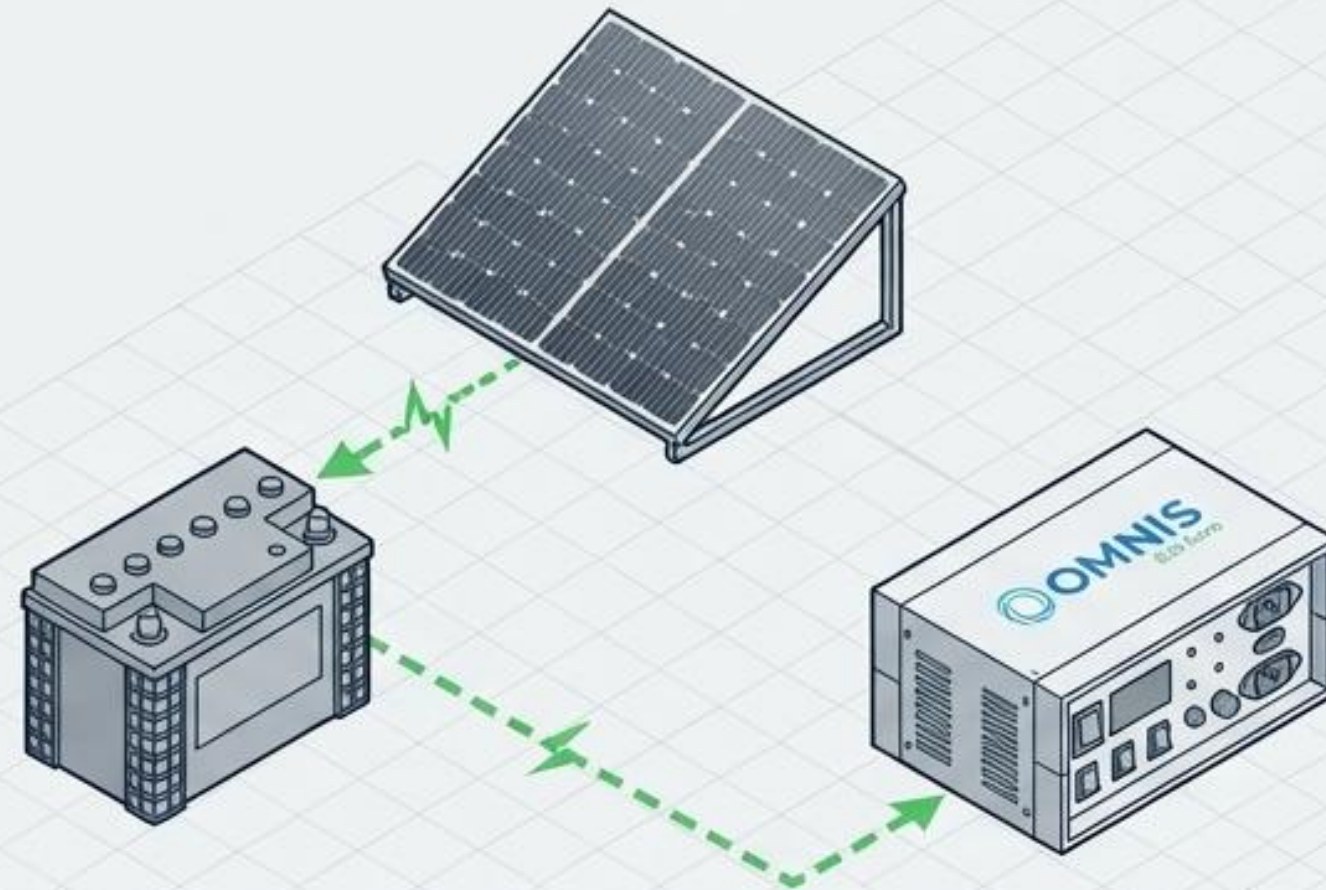
Operational Control

24-Hour vs. 12-Hour (Night only) selector switch.

Output Regulation

High/Low Power toggles and dedicated Sensitivity control knobs to adapt to varying weather and intrusion threats.

Autonomous Power Architecture



Generation

100W Solar Panel

An oversized 100-Watt solar array ensures rapid, continuous energy harvesting even in sub-optimal, low-light conditions.

Storage

12V 65AH Battery

A massive 65 Amp-Hour commercial-grade battery capacity guarantees the system remains active through multiple days of severe weather without solar input.

Automation

LDR Sensor Integration

Equipped with a Light Dependent Resistor (LDR). Enables a fully automatic Night Mode that detects dusk and automatically arms the perimeter when nocturnal wildlife threats are highest, conserving power during the day.

System Infrastructure: Conductors & Isolators Matrix

Conductors (The Veins)	Corner Isolation (The Anchors)	Line Isolation (The Guides)
		
<p>ACSR Wire: 2.59mm (12G) & 2.00mm (14G) options. Anti-rust, anti-cut, guaranteed 30-year life.</p> <p>Clutch Wire: 1.5mm (16G) high-tensile galvanized wire for flexible, heavy-duty routing.</p>	<p>Corner Insulator: Premium UV strain design, solid 4mm construction. 25+ years life. Features a latch for firm grip on any wooden or metal pole.</p>	<p>Hook Insulator: Rated for 15KV (vs. standard 2.5KV/6KV market alternatives). Overlapping hooks for superior wire hold. 25+ years UV-protected life.</p>

Active Perimeter Monitoring & Threat Alerts



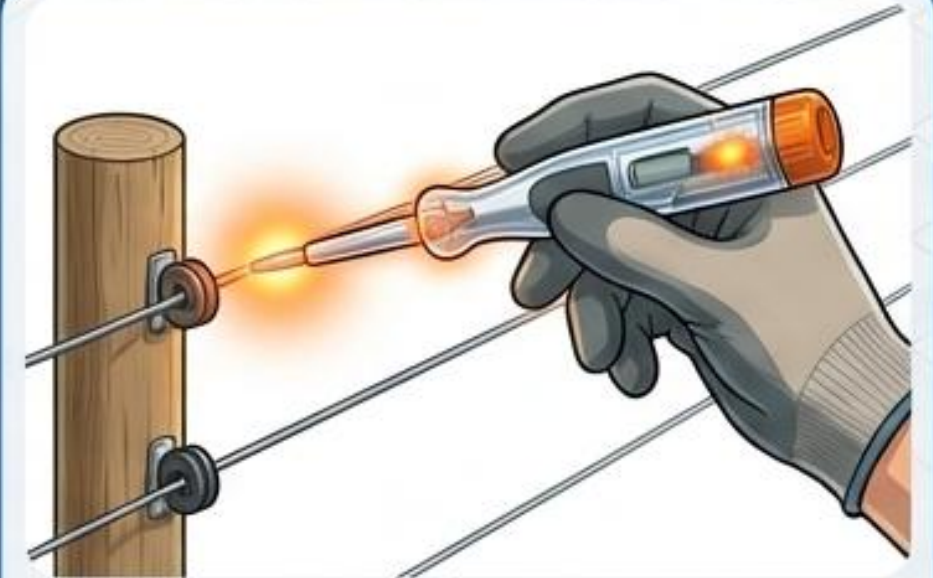
Visual Confirmation (Live Light)

A dedicated red indicator light mounts to the system. It blinks continuously in sync with the 90-pulse-per-minute current. If blinking stops, the farmer instantly knows voltage has dropped or the system is grounded.



Audible Threat Detection (Siren Alarm)

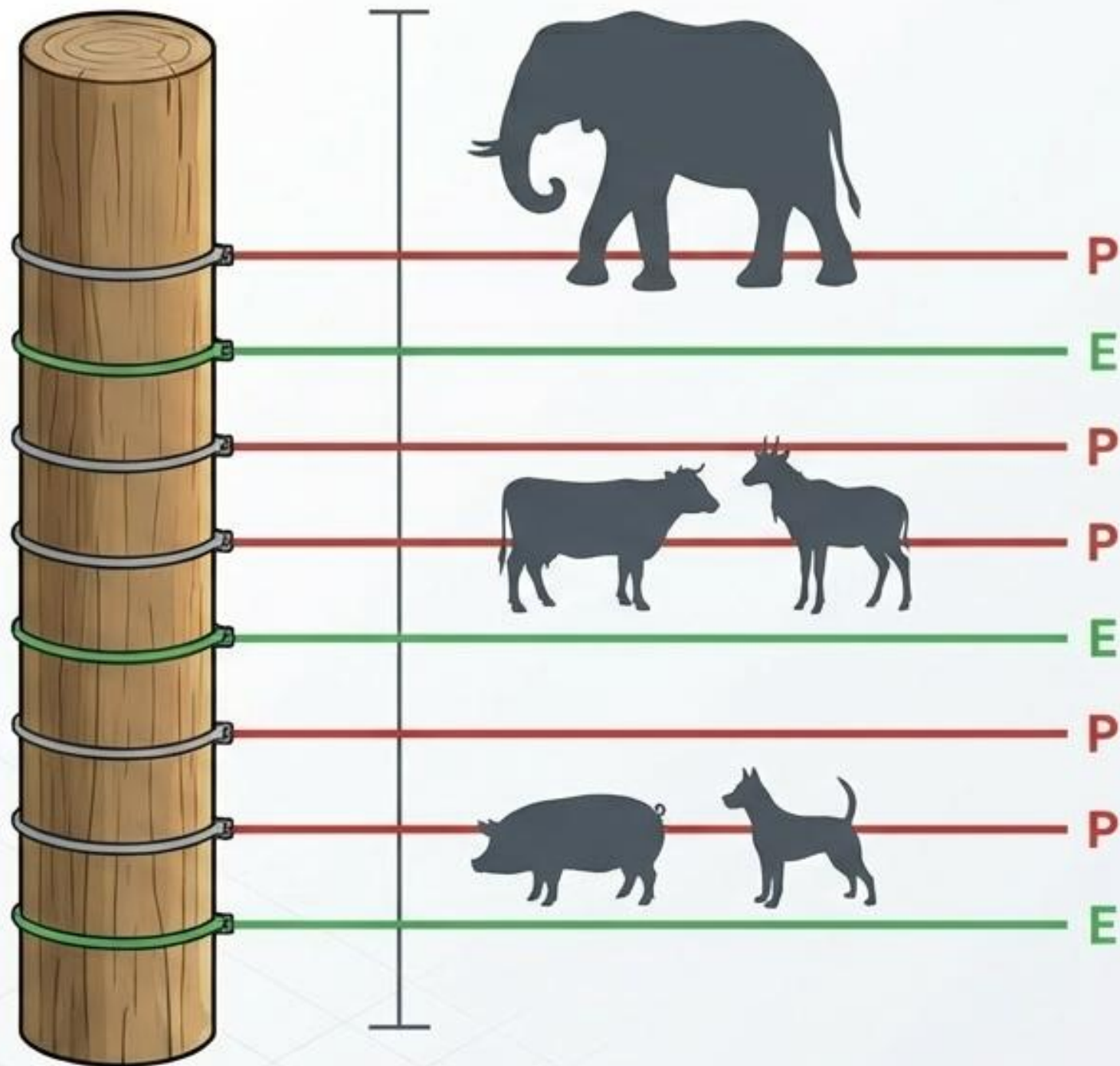
A high-decibel active siren system. If an animal or intruder touches the fence, the system registers the impedance drop and triggers a loud, continuous beeping alarm, alerting the farm manager to a breach in real-time.



Manual Field Testing

The pulse can be safely verified anywhere along the perimeter using a standard electrical test pen, which will flash visibly in time with the shock cycle.

Multi-Layer Exclusion Threat Configurations



Low-Tier Threat (1-2 Layers)

Single or double wire placement near the base. Sufficient for small ground animals (wild boars, stray dogs).

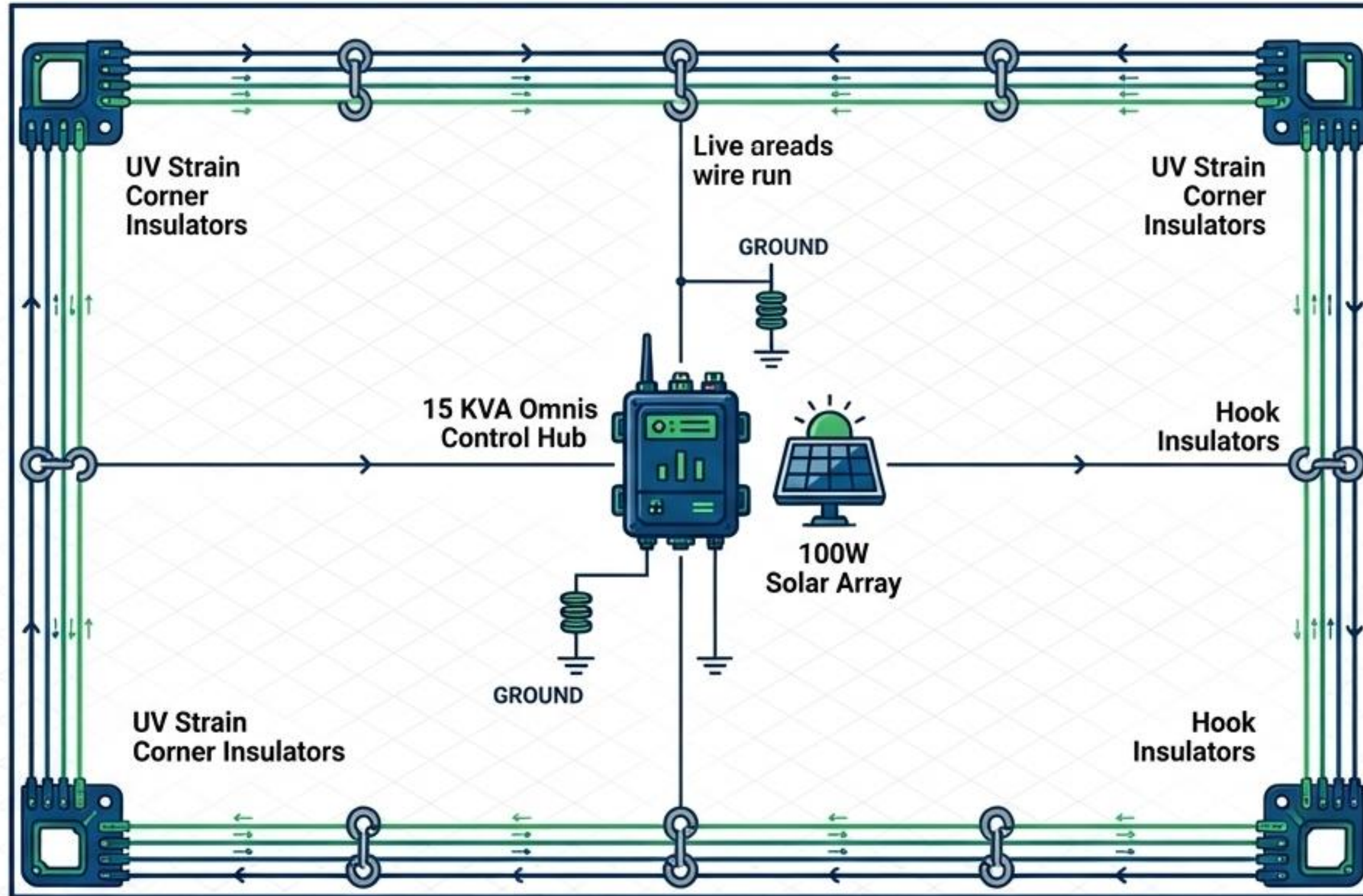
Mid-Tier Threat (3 Layers)

Standard agricultural setup spanning the post. Deters everything from small dogs up to large cows and nilgai.

Maximum Security (8-Layer Advanced Setup)

Engineered for intense wildlife pressure (including elephants). The absolute bottom wire is dedicated strictly to Earth, ensuring growing weeds do not drain the live current. Wires alternate upward to guarantee maximum circuit completion and shock delivery regardless of how the animal strikes the fence.

Implementation Blueprint: 20 Bigha Perimeter Design



Blueprint Legend & Specs

Area Topology

20 Bigha rectangular plot mapping.

Centralized Architecture

The 15 KVA machine and 100W Solar Array are installed at the geographic center of the property. Running leads out to the perimeter from the center splits the distance the current must travel, minimizing voltage drop and maintaining maximum shock efficacy.

Deep Earthing

Proper installation requires deep, moisture-rich earthing pits connected directly to the control unit to ensure the returning shock pulse is powerful and instantaneous.

Structural Integrity & Perimeter Maintenance



Clamp Tighteners (Tension Management)

Heavy-duty galvanized tighteners installed along straight runs. Eliminates wire sag over time, ensuring phase and earth wires never accidentally touch and short the system.



Small Wire Connectors (Splicing)

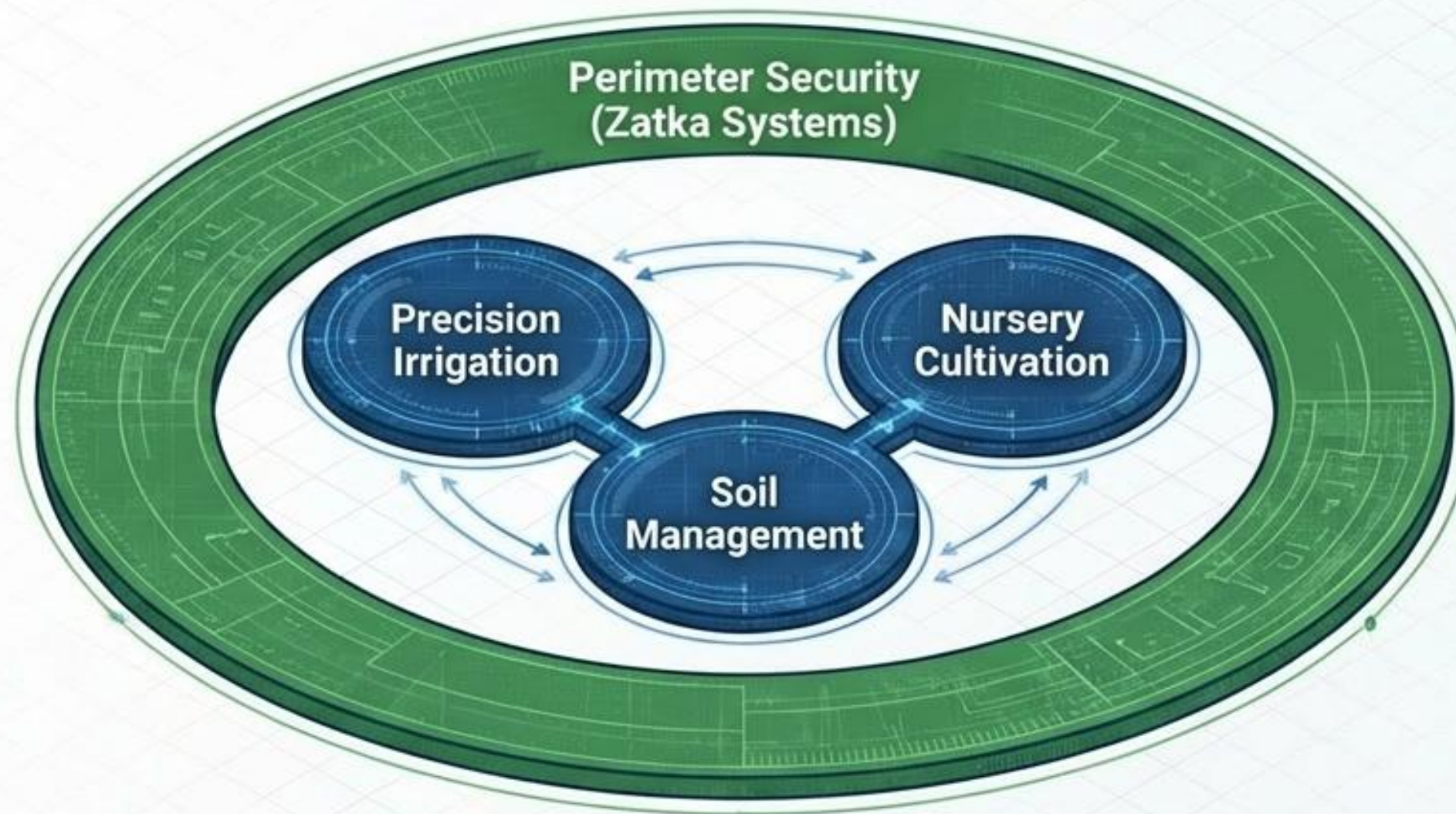
Precision bolted connectors for extending wire rolls or repairing breaks. Ensures 100% electrical conductivity is maintained across joints, unlike manual twisting which degrades the spark.



Spring Gate Handles (Access Control)

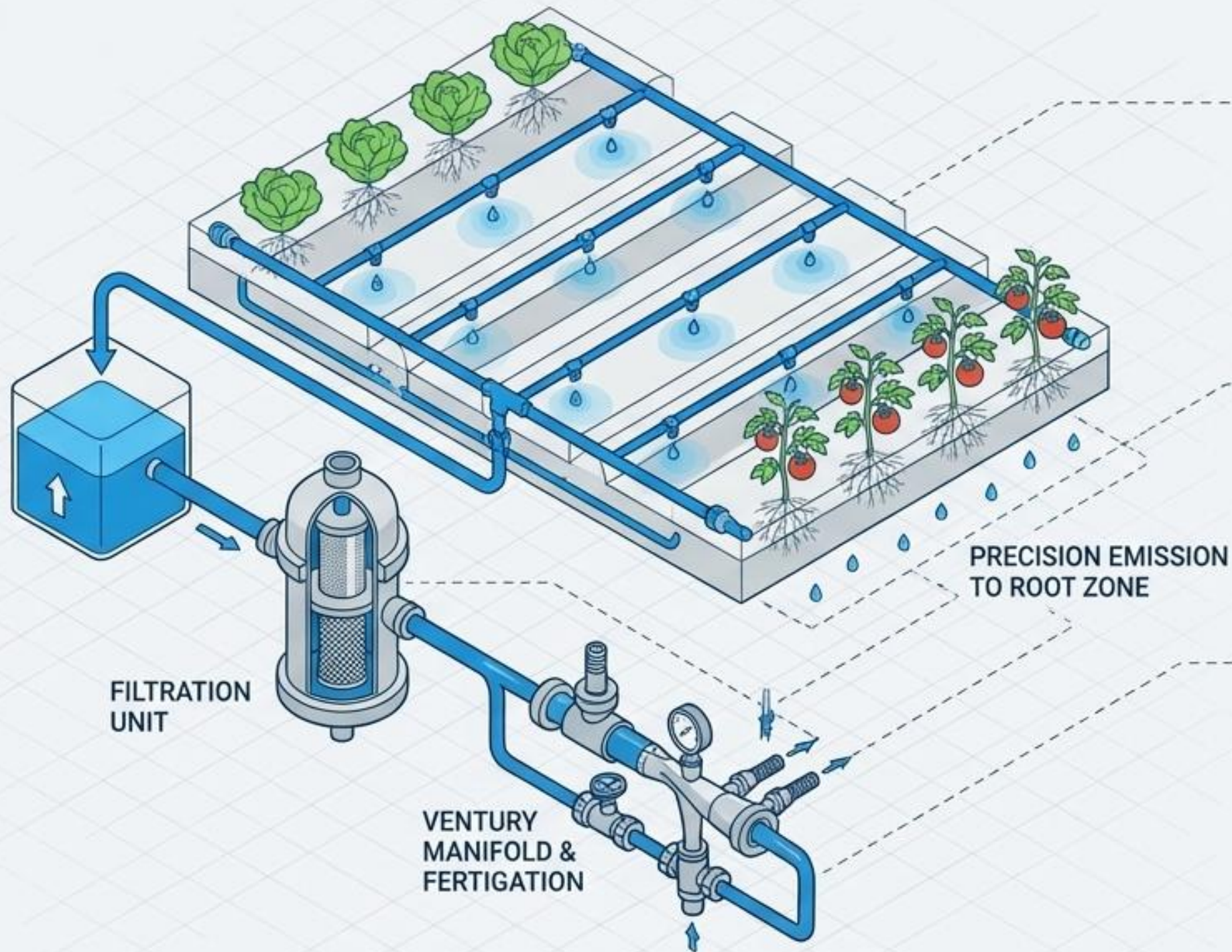
Highly insulated handles with internal tension springs. Allows farm workers to safely unhook and open electrified gates without powering down the entire grid.

Beyond the Perimeter: The Holistic Omnis Ecosystem



Securing the boundary is only the first phase of the modern agricultural blueprint. Omnis Trades serves as a comprehensive commercial partner, supplying the advanced infrastructure required to transition from defending yields to maximizing them. The ecosystem includes state-of-the-art water management, soil temperature control, and early-stage crop cultivation supplies.

Ecosystem Phase I: Advanced Drip Irrigation Systems



Precision Delivery

High-grade Inline and Online drip pipes engineered to deliver exact water volumes directly to the root zone, eliminating evaporation and runoff waste.

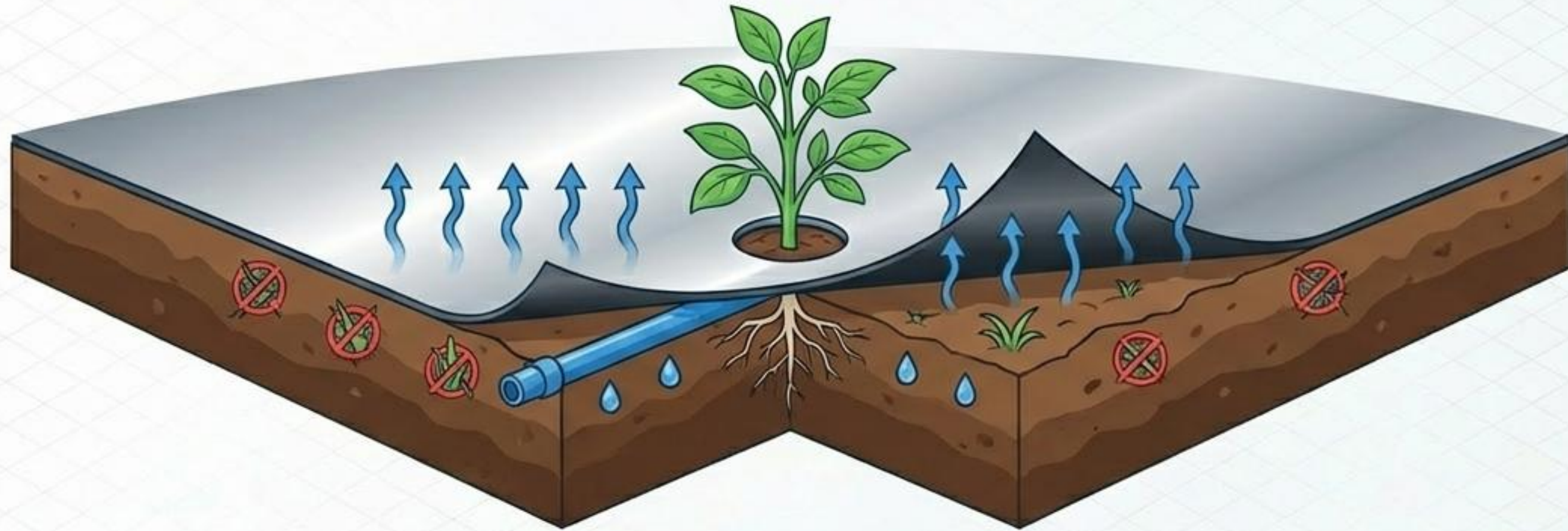
Filtration Architecture

Commercial Screen and Metal filters prevent emitter clogging, ensuring uniform flow rates across massive acreages.

Fertigation Integration

Ventury Manifold assemblies allow for automated, perfectly measured injection of liquid fertilizers directly into the irrigation water stream, drastically reducing labor costs.

Ecosystem Phase II: Sustainable Mulching Solutions



Micro-Climate Control

Premium mulching films designed to drastically reduce water evaporation while regulating soil temperature for optimal root development.

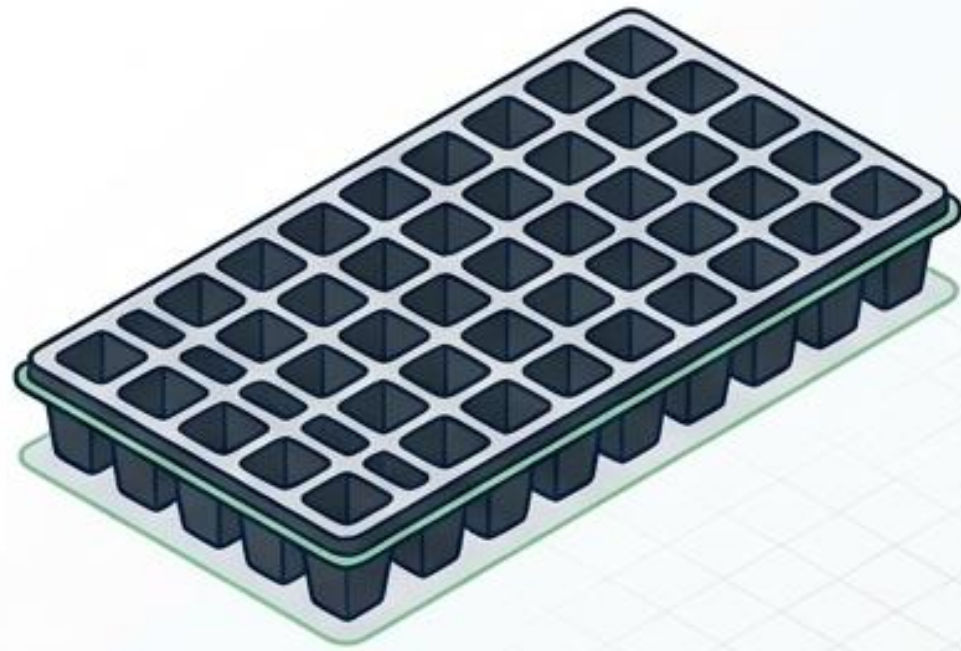
Weed Suppression

Absolute barrier protection against competing weed growth, minimizing the need for chemical herbicides.

Tailored Formulations

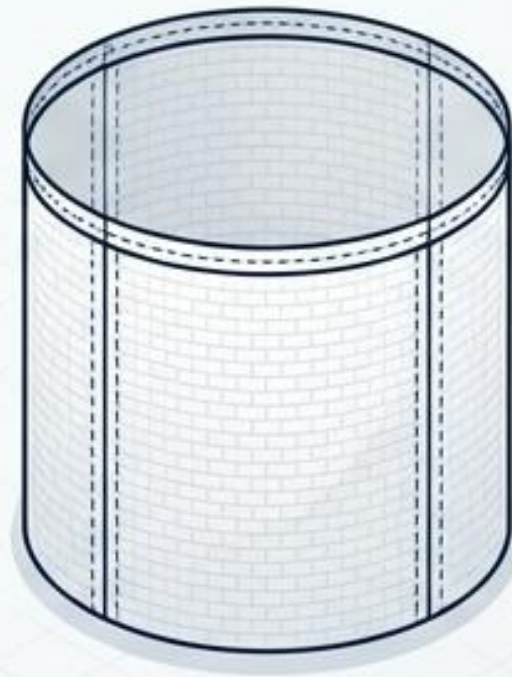
Available in Black/Silver (optimal for light reflection and pest deterrence) and White/Black variants, as well as heavy-duty woven Weed Mats for high-traffic pathways.

Ecosystem Phase III: Premium Nursery & Cultivation Supplies



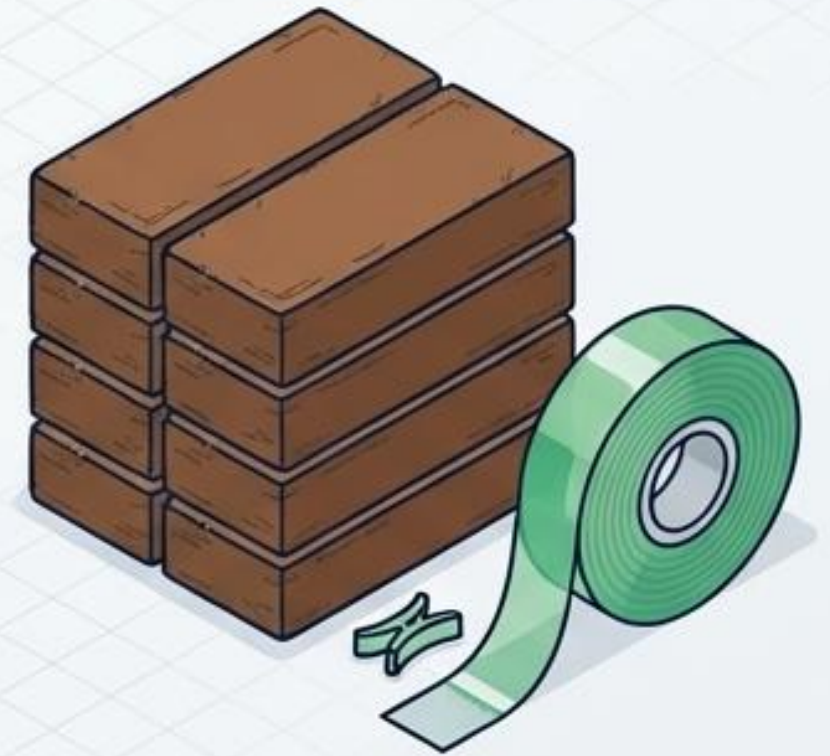
Root Development (Nursery Trays)

High-density cellular trays designed to prevent root entanglement and ensure shock-free field transplanting.



Durable Housing (HDPE Grow Bags)

High-Density Polyethylene bags offering superior UV resistance and breathability compared to standard plastic pots, ideal for long-term greenhouse cultivation.



Growth Media & Cloning

Compressed Cocopeat bricks for optimal moisture-retaining soil amendment, alongside precision Grafting Tapes and Clips for specialized crop propagation.



Omnis Trades: Protect. Irrigate. Grow.



From high-voltage, autonomous perimeter defense to precision root-zone irrigation, Omnis provides the commercial infrastructure required to automate and scale the modern farm.

Corporate Headquarters

Omnis Trades

House No 234, Ground Floor, Rajgarh Road,
8th Bye Ln, 3rd Floor, Guwahati, Assam 781003

Direct Contact

Ph: 7099063700 | 9365292806 | 9954493909 | 0361-3196166

Email: omnistrades2017@outlook.com | omnis@omnistrades.in

Website: <https://omnistrades.in>

