

Distribution Center Perimeter Protection

How a distribution and fulfillment center hardened its 4,000 ft perimeter with the IRONCLAD Fence Alarm System after repeated cargo theft attempts at the fence: four zones on two processors, feeding Milestone XProtect, installed without stopping 24/7 yard operations.



AERIAL VIEW OF A DISTRIBUTION AND FULFILLMENT CAMPUS. ILLUSTRATIVE IMAGERY; CUSTOMER IDENTITY WITHHELD.

4,000 ft

PERIMETER COVERED

4

DETECTION ZONES

2

LPU-402 PROCESSORS

XProtect

MILESTONE INTEGRATION

24/7

YARD RAN THROUGHOUT INSTALL

The Challenge

Cargo thieves were cutting the fence to reach the trailer yard, and nobody knew until after the fact.

The customer operates a high-volume distribution and fulfillment center: a large warehouse ringed by loading docks, a trailer yard holding loaded trailers, and truck lanes that run around the clock. The perimeter is approximately 4,000 ft (1,200 m) of chain-link fence.

Intruders cut through the chain-link to reach staged trailers. Cameras recorded events and patrols found the damage, but neither raised an alarm at the moment of the cut.

WHY CAMERAS AND PATROLS WERE NOT ENOUGH

- Fixed cameras watch zones of interest, not every foot of 4,000 ft of fence, and recording is not detecting.
- Constant truck and yard activity meant any detection system had to separate real intrusions from vibration carried into the fence.
- Any solution had to go in without interrupting 24/7 yard operations.

The Solution, IRONCLAD Fence Alarm System

The IRONCLAD Fence Alarm System turns the existing chain-link fence into the sensor. Sensor cable runs across four zones of approximately 1,000 ft each, on two LPU-402 processors, reading the vibration signatures of cutting and climbing at the fence fabric itself.

- **Per-zone tuning:** the zone beside the truck lane is not tuned like the quiet back line, which is how yard noise is kept below the alarm threshold.
- **Single cable run:** one run per fence line covers fences up to 10 ft (3 m).
- **Milestone XProtect:** an alarm calls up the cameras on the alarmed zone automatically, so operators see the fence while the event is in progress.
- **No disruption:** a security integrator installed the system over a few days with the yard running.

The Results

Detection moved to the fence line, ahead of the trailers and the docks.

The design intent is that an alarm is raised at the moment of a cut or climb, with cameras on the alarmed zone, before an intruder reaches the trailer yard.

- The guard force responds to a verified event at a known zone, not to a bare siren.
 - RBtec has not published measured before and after incident or alarm counts for this site.
- Nothing changed at the monitoring end: the fence became another input into the Milestone XProtect installation the operators already used.
 - The same standard pattern extends to other facilities: count the fence length, divide by zone length, add processors.

"On a logistics yard the tuning is the job. A truck passing three feet from the fence puts more energy into it than a person climbing it, so we set each zone to its own surroundings. The zone by the truck lane and the zone on the back line should never share one sensitivity setting."

RBtec engineering team

IRONCLAD at a Glance

System	IRONCLAD Fence Alarm System
Perimeter	Approximately 4,000 ft (1,200 m)
Zones	Four zones of approximately 1,000 ft (305 m)
Processors	Two LPU-402 units, two zones each
Noise handling	Per-zone tuning against heavy truck and loading dock vibration
Integration	Milestone XProtect VMS, camera call-up to the alarmed zone
Installation	Security integrator, a few days, yard operations uninterrupted
Warranty	2 years



IRONCLAD SENSOR CABLE ON THE PERIMETER FENCE OF THE DISTRIBUTION SITE. CUSTOMER IDENTITY WITHHELD.

Protect your site with RBtec.

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