

Revolutionizing Haul Management

emsProductFocus26-ALTOSHaul



Revolutionizing Haul Management – See Beyond, Act Smarter

Loading zones and haul roads are full of rules: empty trucks in one way, loaded out the other. But manual checks, fake transits, and human errors let wrong vehicles slip through – costing millions in lost coal, inaccurate tracking, and operational headaches.

The Real Problems:

- False transits: Full trucks leave when they should be empty, or empty ones exit when loaded – revenue leaks everywhere.
- Inaccurate counts: Hard to verify how many trucks actually delivered vs. left – no reliable data for reconciliation.
- Slow, error-prone checks: Operators get tired, distracted, or pressured – decisions slip.
- No real-time enforcement: By the time you spot a mistake, the vehicle is gone.



EMS + Opsys LiDAR Solution: Altos70 – Your Automated Haul Gatekeeper Altos70 uses Opsys LiDAR's lightning-fast scanning (1000x per second across the full FOV) to see vehicle loads clearly – even in dust, darkness, or harsh conditions – and automatically decides if the truck can proceed.



How It Works (Fast, Autonomous & Reliable):

- **Overhead gantry mounting:** Altos70 pod installed above the lane – gets a perfect top-down view of the entire load area.
- **High-speed LiDAR scanning:** Builds detailed 3D point clouds in real time – detects load height, shape, and fill level with unmatched accuracy (high SNR for low-reflectivity coal/rock).
- **Two modes for flexibility:**
 - **Altos70Auto:** Makes the call – opens the gate (or signals Milestone to open) only if the vehicle matches the direction rules (empty in / full out). Captures a 2D image of every approved transit for records.

- **Altos70STD:** Reports load status (loaded/empty) to your system – no gate control, just accurate data.
- **POE connectivity:** Simple network power – easy install and integration.
- **Output options:** MQTT / ONVIF-M to Milestone, CAP, or your preferred platform – alarms, images, and events flow seamlessly.

Key Benefits You'll See Immediately:

- **No false transits:** Blocks full trucks leaving empty zones and empty trucks leaving loaded zones – stops revenue loss cold.
- **Accurate tracking:** Counts every truck that drops coal at the power station and every one that leaves – perfect reconciliation.
- **Real-time enforcement:** Automatic decisions eliminate human error – rules enforced every time.
- **Recorded evidence:** Every transit (approved or challenged) logged with images – easy audits and issue spotting.
- **Big cost savings:** Millions saved by preventing fake loads, optimizing haul cycles, and reducing manual checks.



Why Opsys LiDAR + Altos70 Wins:



- **Sees further & clearer:** High POD even for low-reflectivity materials at distance – works in dust, rain, night.
- **React faster:** Instant load analysis and gate decisions – no delays.
- **Achieve more:** Reliable data drives better planning, fewer disputes, and tighter operations.

Stop losing money to false transits and inaccurate counts – automate your haul lanes with intelligence that never sleeps.

Ready to lock down your loading zones and gain full visibility?

Contact EMS today to learn more about Opsys LiDAR and Altos70 – and revolutionize your haul management with automated, accurate, and cost-saving control.

See beyond. Act smarter. Save millions. 

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