

KNOW WHAT'S GOING ON INSIDE YOUR TRAILER

AND AROUND YOUR DOCK

Transportation and Logistics faces many e-commerce demands



**INCREASED PARCEL
VOLUMES**



**FASTER DELIVERY
EXPECTATIONS**



**ESCALATING PARCEL
PROCESSING**



**RAPID RESPONSES TO
SEASONAL DELIVERIES**



This puts organizations under pressure

ENVIRONMENTAL PRESSURE

The need to reduce annual emissions while idling grows.

- **NO₂**
- **Particle matter**
- **CO₂**



COST PRESSURE

Factor in labor, maintenance and fuel.

- **Per mile expenses**



SAFETY PRESSURE

Increased quantity of orders leads to:

- **More boxes** to load and unload
- **Workforce** injuries and downtime
- **Damage** to parcels

What can you do with SmartPack™ Trailer analytics?



Monitor loads using 3D sensing and RGB image technology.



Calculate load quality.



Generate real-time load fullness and volumetric efficiency data.



Receive alerts based upon load status.

MAINTAIN LOAD STATUS HISTORY FOR ADDITIONAL ANALYSIS



Utilize a fixed or mobile dashboard.



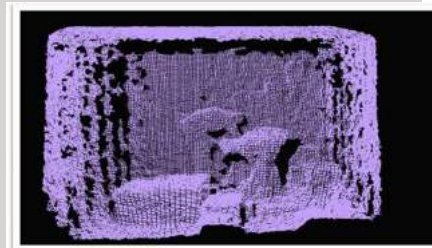
Real-time metrics for snapshots, alerts and decision making.



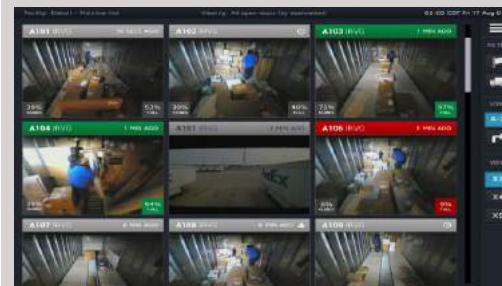
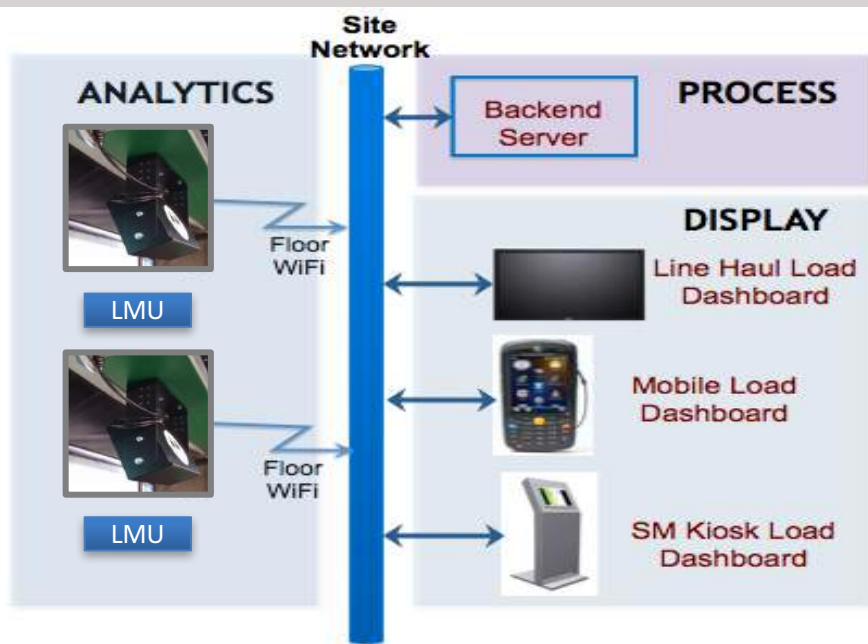
SMARTPACK TRAILER



RGB Snapshot



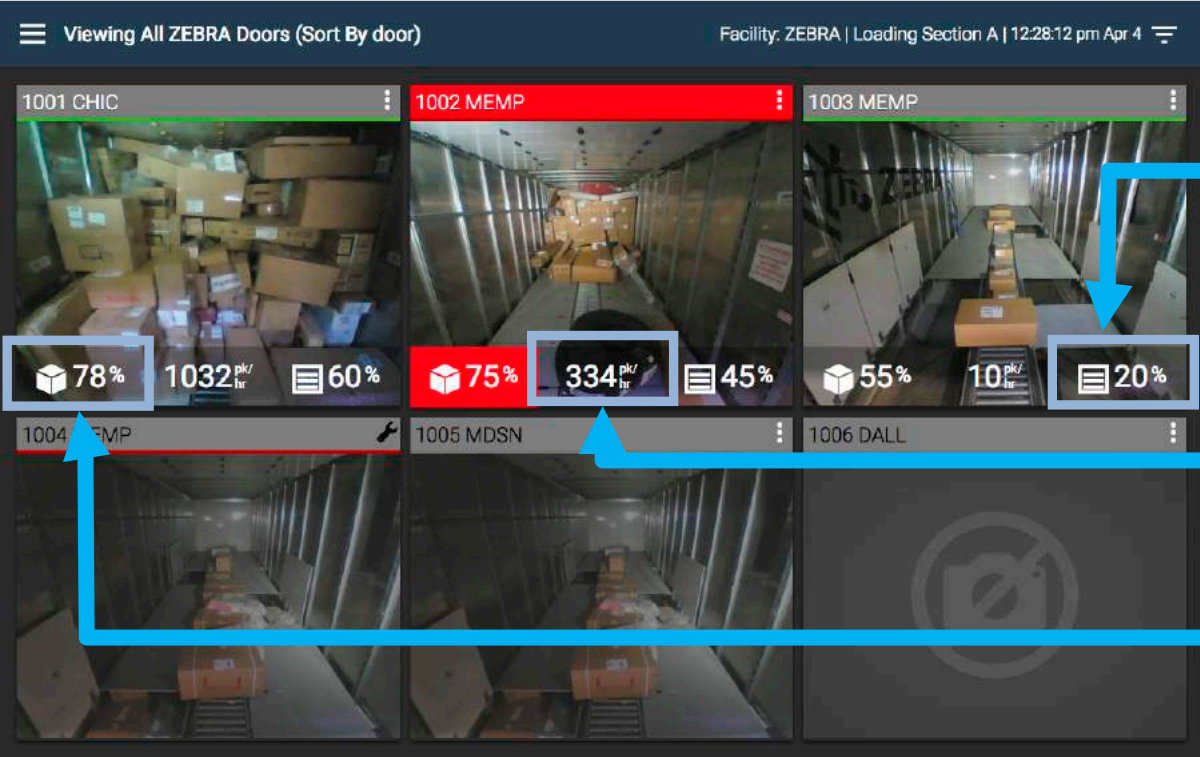
Depth Map



Load Dashboards



Analytics Dashboard



Trailer Fullness

Load Rate

Cube Score
(Space Utilization)

Take the best route for optimizing your operations

Introducing SmartPack™ Trailer

UTILIZE 3D SENSING TECHNOLOGY

To enhance load efficiency and quality.

CAPTURE LIVE IMAGES

on a centralized dashboard view.

RECEIVE REAL-TIME INSIGHTS & DATA to improve processes and safety.

DELIVER REAL-TIME VISIBILITY

into your loading operations.

SUPERVISE MULTIPLE LOADING DOCKS simultaneously.



Watch performance go up, as operational costs go down

THE COST SAVERS



MEASURE VOLUMETRIC EFFICIENCY for better space utilization.



TRACK FULLNESS in every trailer.



MANAGE MULTIPLE LOADS via fixed or mobile dashboards.



COLLECT & ANALYZE REAL-TIME DATA AND HISTORICAL TRENDS from one or multiple loading docks.

Less trucks on the road
= less fuel consumption
and maintenance.



Alert drivers when trailers are full = faster departures.



Eliminate "walking the dock"
= utilize resources more effectively.



Enterprise-wide best practices
= improved load productivity
and asset utilization.



THE VALUE CREATORS

Load trailers more quickly and accurately



MONITOR LOAD RATES in all trailers.



CHECK VISUAL INDICATORS for load quality status.



TRACK WORKER ACCURACY when stacking loads in progress.



CUSTOMIZE ALERT TRIGGERS for weight levels and volumetric efficiency.



ACCESS REAL-TIME VIEWS into fullness, rate and space efficiency.

Know how long it takes employees to complete a load.



Help workers and managers optimize space utilization and time.



Bring improper loading to the dock manager's attention.



Correct loading deficiencies and avoid potential regulatory issues.



Analyze load density and speed of loading to apply process improvements.



THE TIME SAVERS

THE EFFICIENCY BOOSTERS

Improve quality, training and safety

THE RIGHT TOOLS



MONITOR LOAD CONSTRUCTION
to ensure balance and proper stacking.



CENTRALIZED DASHBOARD
to monitor the loading process and worker performance.



MAXIMIZE HISTORICAL DATA & IMAGES
to develop or improve safety and training.

Prevent loads from shifting while in transport, reducing damage.



Identify improper loading techniques before injury occurs while minimizing theft and losses.



Capture images of your employees loading techniques for training opportunities.



THE RIGHT RESULTS

Reimagine your loading operations

SHIP LESS AIR
and maximize load efficiency.



REDUCE FUEL CONSUMPTION
and maintenance costs.



REDUCE DOWNTIME
and injuries.



IMPROVE WORKERS' SKILLS,
manage resources, and make
training relevant.



**ACHIEVE DEEPER DATA-DRIVEN
VISIBILITY** to keep workflows and
productivity moving forward faster.



SmartPack™ Trailer Architecture

Load Monitoring Unit Technology:



3D Sensor



RGB Camera



Ethernet/WiFi



Thermo Electric Component for cooling/heating

Dock Doors



Load Monitoring Units (LMU)

Load Data and Images



Trailer Information and Package Data



Customer WMS



SmartPack™ Trailer Analytics Server Software



SmartPack™ Trailer Dashboard provides real-time loading status and alerts



Customized Integration by Zebra Services

SmartPack™ Trailer Technology



**RS6000 RING
SCANNER**



**WT6000 WEARABLE
MOBILE COMPUTER**



**SMARTPACK™ LOAD MONITORING
UNIT AND SOFTWARE**



ET50 TABLET



VISIBILITY THAT'S VISIONARY.

THANK YOU

Learn more at zebra.com/contact

