

# HOW CARGO SENSORS WORK



Our cargo sensor (pictured at left) is an acoustical sensor in the nose of the trailer that sends sound waves into the trailer every 60 minutes to check for cargo. The time it takes for the sound waves to return to the sensor indicates whether the trailer is loaded or empty:

- Short period of time = sounds waves bouncing off cargo and returning faster = loaded
- Long period of time = sound waves traveling the length (45') of the trailer and taking longer to return = empty

See the real-life example below.

**4 pm**

Your driver pulls up to the dock to have your trailer unloaded.



Regular scans



**4:20-5 pm**

Workers unload the trailer.



**5:00 pm**

The cargo sensor's regular hourly scan detects a change in cargo status. The sensor switches to fast-poll mode and scans the trailer 3 more times, 15 minutes apart.



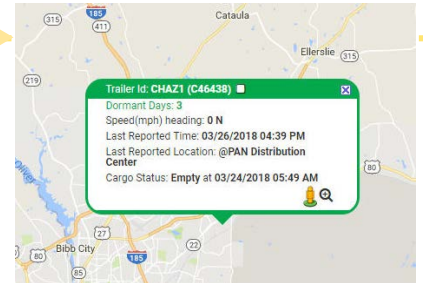
Fast-poll scans



**5:45 pm**

Because the sensor "saw" the trailer empty for 3 fast-poll scans in a row, it reports to your dashboard that cargo status changed from "Loaded" to "Empty".

It tags the change "5:00 pm" because that's the time it first detected the change.



**In real time**

[xtralease.com](http://xtralease.com)

The trailer was completely unloaded by 5 pm, but was verified as empty at 5:45 pm and reported to your dashboard.

