

# Rover Landing Gear Load Cell

Industry: Aerospace

## Summary

### Customer Challenge

A space company wants to measure the cushioning effect of their rover's landing legs through a drop test. They want to test how much force the landing gear can absorb until issues are caused in the legs.

### Interface Solution

Interface suggests using the INFRD Platform Scale, which has four shear beam load cells installed at the corners of the scale. A drop test is conducted at different heights, and the results are summed using a JB104SS Junction Box built in the scale. The results are measured and logged on the provided SD card. Results can be also be viewed and logged when the 9330 connects to a PC.

### Results

The INFRD Platform Scale was able to capture the forces that was implemented onto the rover's landing gear through these drop tests.

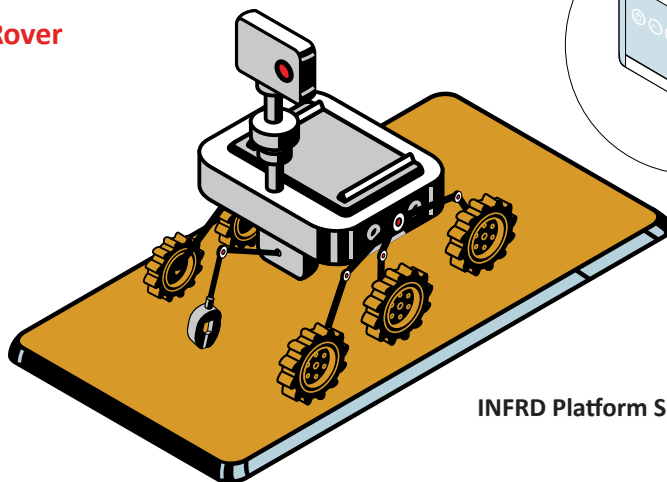
## Materials

- INFRD Platform Scale
- 9330 Battery Powered High Speed Data Logging Indicator with BlueDAQ software and SD card
- Customer PC or Laptop
- Rover

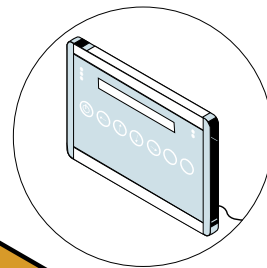
## How It Works

1. The rover undergoes drop tests onto the INFRD Platform Scale.
2. The forces are summed together through the built in JB104SS Junction Box.
3. The results are measured and logged on the provided SD card. Another option is the results can be also be viewed and logged when connected to a PC.

Rover



INFRD Platform Scale



9330 High Speed Data Logging Indicator