

Drone Parcel Delivery

Load Cells & Torque

Industry: Industrial Automation

Summary

Customer Need / Challenge

- Rapid delivery of packages has now migrated to the use of “Delivery Drones”.
- The Customer needs to weigh the payload of the package being delivered while the propeller motors compensate for weight shifting or uneven weight distribution of the package to lift and fly the package to its destination.

Interface Solution

- 4 Interface WMC Sealed Stainless Steel Miniature Load Cells are used to measure the weight of the payload and detect weight shifting or uneven weight distribution of the package which would signal the necessary propeller motors to compensate for an uneven weight load.

Results

- The 4 WMC load cells accurately measured the payload weight and maintained stability of the propeller motors to safely deliver the parcel. This information, was communicated to the drones on-board processor for monitoring and recording this information during flight.

Materials

Interface Solution

- (4) WMC Sealed Stainless Steel Miniature Load Cell

How It Works

- The 4 WMC Sealed Stainless Steel Miniature Load Cells are connected independently to each of the 4 landing gear legs. Once connected to the drone’s processor, weight of payload is immediately communicated and stored, as well as detecting uneven weight distribution communicating with the individual propeller motors to increase the RPM’s and balance the weight.

(4) WMC Sealed Stainless Steel Miniature Load Cell

