



Pharmaceutical Vial Seal Tightness Drone

TECHNICAL SPECIFICATIONS

Drone Specifications	
Housing Model and Material	ABS, Aluminum housing, PEEK cap and foot, PVC sleeve exterior
Max Housing Dimension	Based on vial dimensions
Sensing Dimensions	Based on vial dimensions
Weight	Matches filled vial weight (2 ml = 10 g; 50 ml = 96 g)
Load Sensing	
Sensor Technology	Internal Load Element
Number of Pressure Sensors	1 Single vertical load measurement or seal tightness measurement
Force Sensing & Calibrating Range	0-50 lb psi (222N)
Safe Load Limit	75 lb (333N)
Force Accuracy	< 5%
Motion Sensing	
Spin about vertical axis	0 - 2000 degrees/sec, 333 RPM
Rotation about vertical axis	0 - 360 degrees
Tilt from vertical axis	0 - 180 degrees
Accelerometer	0 - 30 g
Orientation	Absolute 3D orientation of 3D model
Electronics	
Power Requirements	50 mAh @ 3.7v
Battery Capacity	1-4 hours run time, lithium polymer
IP Water Resistance	At least IP67
Operating temperature	10°C to 60°C
Wireless Range	Target 5 m +
Data Rate	20 - 50 Hz variable depending on pressure, typical 30 Hz
Software	
Platform	Windows 10 on Surface Pro Tablet

