



# PRODUCT DATA SHEET - LDG 3A-265

Specifications	LDG-3A-265
Gimbal Dimensions (L x W x H)	36" x 27" x 27"
Gimbal Weight (w/o payload)	117 lbs (+ external gimbal cables 5-10 lbs. installation dependant)
Payload Weight (typical)	45 – 100 lbs
Payload Volume (typical)	≈3800 in <sup>3</sup>
Payload Long Dimension (maximum)	14½"
Power Requirement (excluding payload)	6A typical – 25A max. at 28VDC
Steering & Stabilization	
Stabilization Type	Multiple axes (6 axes passive, 3 axes dynamic rotational, 3 axes steering)
Passive Vibration Isolation	Yes, F <sub>N</sub> = 6-12 Hz
Order of Outer Axes	Roll, Pitch, LOS
Stability (Line of Sight Jitter – excluding at resonances)	< 5 μRAD RMS (as measured on individual axes)
Geo-Pointing	IMU/INS providing +/- 1.5 milliradians pointing accuracy
Slew Rates	≥ 55°/sec maximum
Maximum Acceleration (payload dependent)	≥ 100°/sec <sup>2</sup> maximum
Range of Travel	Roll ± 120° (adjustable according to program requirements)
	Pitch ± 50° (adjustable according to program requirements)
	LOS ± 195° (or continuous rotation options available)
Environmental	
Temperature Range (Operational)	-35°C to +40°C
Temperature Range (Non-operational)	-55°C to +71°C
Altitude – maximum (subject to temperature limits)	35,000 ft
Airspeed – maximum (non-operating / operating)	350 knots IAS (in stow mode) / 150 knots IAS
Load Resistance – Shock / Crash Safety	6g for 20 ms / 10 g for 11 ms
Environmental Systems	Breather and desiccant systems
Features	
GPS Interface	Novatel OEM-V (external mounting is standard)
Gimbal Control Interface	cTune2 Gimbal Control and Monitoring Tool
LOS Meta-Data	Yes (Nav-GPS, mount/earth LOS angles, gimbal status, target position, UTC time)
Included Components	Shipping Container + External Gimbal Cables + Test Stand + cTune2
Third Axis Cable Management	Components to manage payload cabling through the third axis.
Optional Items	
Special Gimbal Operating Modes	Motion Compensation (Forward/Rotational); Line Tracking; Path
Third Axis Continuous Rotation	Components to allow continuous rotation about the LOS axis.
Interface Software Development Kits	RCI and CGI SDKs - To assist with gimbal interface software development.
Thermal Management	Heater, circulating fans and heat exchanger options available.
Internal GPS	Option to mount GPS within the gimbal outer ring.
Mounting Brackets/Pods/Fairings	Fuselage, side-mount and removable half-door installations available.
Service and Support	
Warranty	12 months/1000 hours
Required Maintenance Checks	Pre-flight, 100 hour and 1000 hour
Training Available	Operation/Maintenance
Contact Information/Website	<a href="mailto:sales@pv-labs.com">sales@pv-labs.com</a> / <a href="http://www.pv-labs.com">www.pv-labs.com</a>



**PV Labs Inc. LDG 3A-265 Gimbal with optional pod and fairing**