



Lift Performance Tester

- Propulsion - Lift Force - Propeller - Motor - Test & Characterization -



App-Lab's Lift Performance Tester is a test and measurement instrument to characterize the performance and efficiency for combinations of propellers and motors used on drone sized aerial vehicles such as multi-copters and airplanes.

Measurements:

- Lift force
- Motor angular speed
- Motor temperature
- Motor power

Analysis:

- Propellor & motor lift force
- Propellor & motor efficiency
- Propellor & motor combinations

Reporting:

- Web based user interface
- Scripting via SSH
- Export data to Excel spreadsheets
- Optional trending & plotting display



Accessories:

- Safety Enclosure for static parametric measurements
- Optional air tunnel for dynamic air flow parametric measurements
- Optional vacuum Chamber for altitude

Motor Power Options:

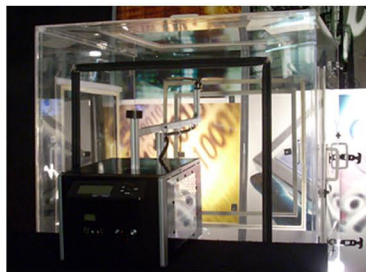
- 12VDC (@33A)
- 24VDC (@16A)
- Custom external power supply

Lift Performance Tester



Specifications

Category	Parameter	Min	Typ	Max	Units
Measurements					
	Angular Speed			25K	RPM
	Lift Force			79 (18)	N (lbf)
	Motor Temperature	-40		125	C
	Motor Power (12VDC Option)			400	W
	Motor Power (24VDC Option)			450	W
	Motor Power (Custom External Option)			BTO	W
Electrical					
	Tester Power (12VDC motor option)		425W		W
	Input Voltage		120		VAC
	Connector	IEC 60320 C-14			
Data Interfaces					
	LAN	10		100	Mbps
	USB (v2.0 - 2)	1.5		12	Mbps
	VGA (1)				
Mechanical					
	Length		36		in.
	Width		11		in.
	Height		15		in.
	Weight		20		lbs/.
Envrionmental					
	Temperature	10		32	C
	Humidity	20		80	%RH



Solutions



App-Lab provides innovative data collection solutions including an array of robust sensors, detectors, multi-core systems and network devices that incorporate customizable software by a team of creative experts who can apply these solutions to meet a wide variety of needs.

Today, App-Lab is expanding its product line to offer multi-core processing engines for applications such as auto-navigated drone platforms, particle detection algorithms and other multi-functional applications requiring integrated low power processing cells. In addition to its unique sensor, network and processing technology, App-Lab has extensive experience within the government product life cycle that includes system and software design compliance and certification to customer requirements. App-Lab has worked with both government and prime contractor project managers to verify system requirements at governmental approved lab sites such as Dugway, Aberdeen and White Sands.