

LY-70KGF Propulsion System Test Bench			Remarks
Basic Information	Operating Temperature	0 ~ +40 °C	
	Operating Humidity	≅80%(No condensation)	
	Storage Temperature	-20 ~ +60 °C	
	Storage Humidity	≅ 90%(No condensation)	
	Net Weight	45 kg	
	Dimension	1200*600*900 mm	
	Power Supply	12V 2A DC5521	
Propulsion system	Recommended Propulsion	Max Thrust 20-50kg	
	Min Propulsion	Max Thrust >5kg	
	Max Propulsion	Max Thrust 70kg	
	Max Propeller	60 inch	
Voltage & Current	Voltage Range	5 ~ 110 V	Over Range is Prohibited, otherwise test stand will be damaged permernantly.
	Voltage Resolution	0.01 V	
	Voltage Accuracy	0.05%+0.05%FS	
	Current Range	0 ~ 300 A	
	Current Resolution	0.01 A	
	Current Accuracy	0.1%+0.1%FS	
Thrust	Range	70 kgf	Destructive Experiment is Prohibited. DO NOT test Propulsion system with Strong Vibration
	Resolution	1 gf	
	Accuracy	0.1%+0.1%FS	
Torque	Range	50 N•M	
	Resolution	0.01 N•M	
	Accuracy	0.1%+0.1%FS	
RPM Sensor	Range(bipolar Motor)	60 ~ 150000 RPM	eg:Motor series 28, max rotational speed is 10714RMP, Accuracy± 10RPM.
	Resolution	1 RPM	
	Accuracy	0.05%±0.05%FS	
Temperature Probe	IR Temperature (Motor case)	-70 ~ +350 °C	
	Resolution	0.1 °C	
	Accuracy	±0.5 °C	
	Ambient Temperature	-40 ~ +125 °C	
	Resolution(Ambient Temperature)	0.1 °C	
	Accuracy(Ambient Temperature)	±0.5 °C	
Optional			Remarks
Airspeed sensor (differential pressure)	Range(Differential Pressure)	1 psi	Do NOT display differential pressure. No fixed Airspeed accuracy. The higher the airspeed, the higher the accuracy.
	Resolution(Differential Pressure)	0.84 pa	
	Accuracy (Differential Pressure)	1%	
	Airspeed(standard atmosphere)	5 ~ 100m/s	
	Airspeed Resolution	0.1 m/s	
	Length of "L" Pitot tube	800 mm	
Optical Speed Sensor	Range(Two Blades)	0 ~ 90000 RPM	Resolution and accuracy increase with the number of blades. User can put stickers on the motor shell for speed measurement.
	Resolution(Two Blades)	30 RPM	
	Accuracy(Two Blades)	±30 RPM	
Barometric sensor	Range(Barometric Pressure)	50 ~ 120 kpa	
	Resolution	0.01 kpa	
	Accuracy	±0.4 kpa	
	Humidity Range	0 ~ 100 %RH	
	Humidity Resolution	1 %RH	
	Humidity Accuracy	±3%	
Wireless Data Transmission	Frequency	2400 MHz	Communication CAN NOT go through Metal Barriers.
	TX Power	20 dBm	
	Communication distance (Open Area)	2000 m	