

DYNOTIS ST-501

For Heavy-Lift Drones, You Need Heavyweight Data.

Introducing the Dynotis ST-501

Extreme Capability. Elite Precision

The Dynotis ST-501 is the ultimate thrust and torque test stand, purpose-built for industrial UAVs, hybrid drones, and high-voltage propulsion systems. With support for propellers up to 60 inches, thrust measurement up to 50 kgf, and current handling up to 300 A, it is engineered for large-scale drone developers & aerospace research teams. Its rugged frame, ultra-high sampling rate & intelligent power analytics make it the benchmark for heavy-duty testing.

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Powered by

DYNOTIS



THRUST TEST STANDS

SPECIFICATIONS

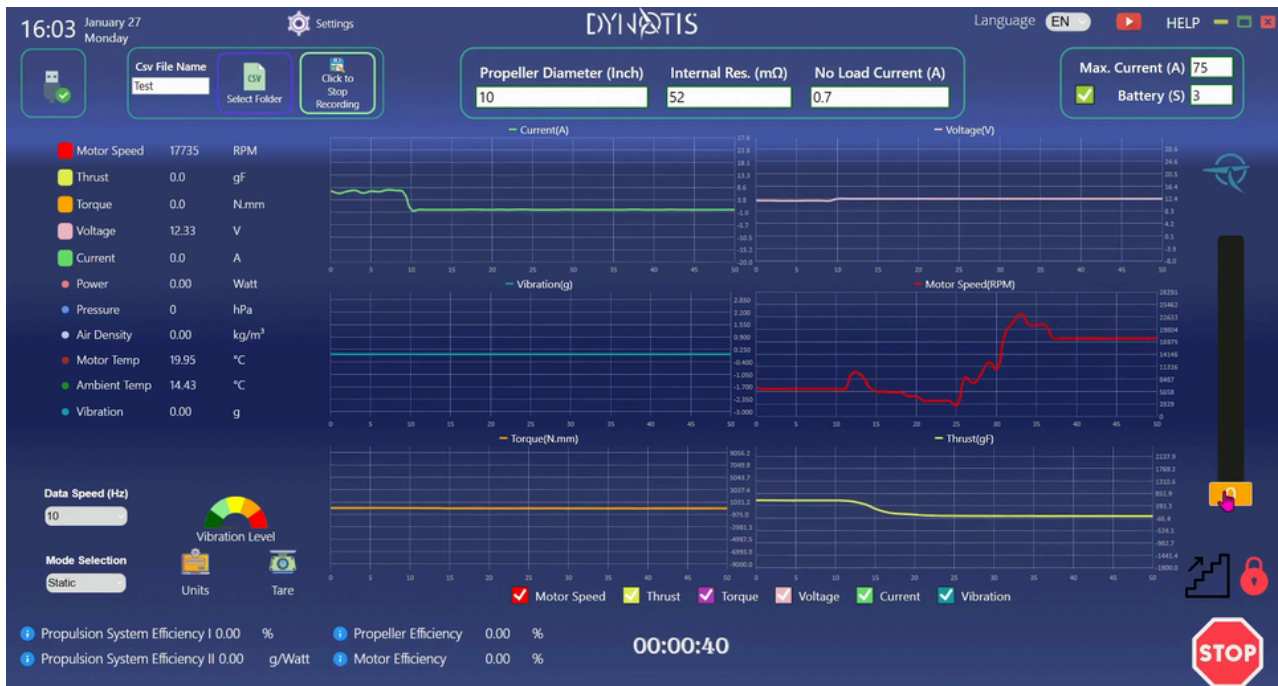
THRUST	50 kgf
THRUST ACCURACY	±1 %
VOLTAGE	0 -120 V
VOLTAGE ACCURACY	±0.5%
CURRENT	0 - 300 A
CURRENT ACCURACY	±1%
RPM	0-100,000 (±1 RPM)
TORQUE	30Nm (±1%)
MOTOR TEMPERATURE	-20°C ~ +350 °C
MAX PROPELLER DIA	60 inches
SAMPLING RATE	1000Hz
POWER SUPPLY	5V 1A USB Type-C
OPERATING TEMPERATURE	-20°C - 50°C



Dynotis Benchmark Software

Precision in Data. Power in Insight.

Real-time monitoring, precision graphing, and detailed data logging – all in one powerful interface. Designed for seamless testing and performance analysis of UAV propulsion systems.



FEATURES



REAL-TIME DATA MONITORING

View live readings of thrust, torque, RPM, voltage, current, and temperature – all in one intuitive dashboard.



HIGH-SPEED GRAPHING

Visualize system performance with real-time graphs powered by 1000 Hz sampling, ideal for fine-tuning UAV propulsion.



CUSTOMIZABLE DATA PANELS

Arrange and personalize your display to focus on the parameters that matter most to your testing workflow.



DATA LOGGING & EXPORT

Automatically record all performance metrics and export them in CSV or spreadsheet formats for in-depth analysis.



MULTI-AXIS SYNCHRONIZATION

Sync multiple channels for precise correlation of electrical and mechanical parameters over time.



LIVE ALERTS & THRESHOLDS

Set operational limits & receive instant alerts when values exceed safe ranges – enhancing safety.



ANALYSIS-READY REPORTS

Generate Professional test reports for internal R&D, presentations, client documentation – with just one click.



PLUG & PLAY INTEGRATION

Seamlessly connects with all Dynotis test stands via USB, ensuring quick setup with no complex calibration.