

DYNOTIS ST-51

Where Innovation meets compactness



Introducing the Dynotis ST-51

Precision-Driven. Lab-Tested. Performance-Ready.

The Dynotis ST-51 Thrust Test Stand is a high-performance, compact testing platform engineered for drone developers, UAV manufacturers, and R&D institutions seeking accurate propulsion diagnostics. With multi-parameter measurement capabilities – including thrust, torque, RPM, voltage, current, and motor temperature – the ST-51 delivers laboratory-grade data in a lightweight and portable form.

Built for bench-top integration and field versatility, it empowers users to fine-tune motor-propeller combinations, prevent in-flight failures, & accelerate innovation with precision, reliability, and ease.

Powered by



SPECIFICATIONS

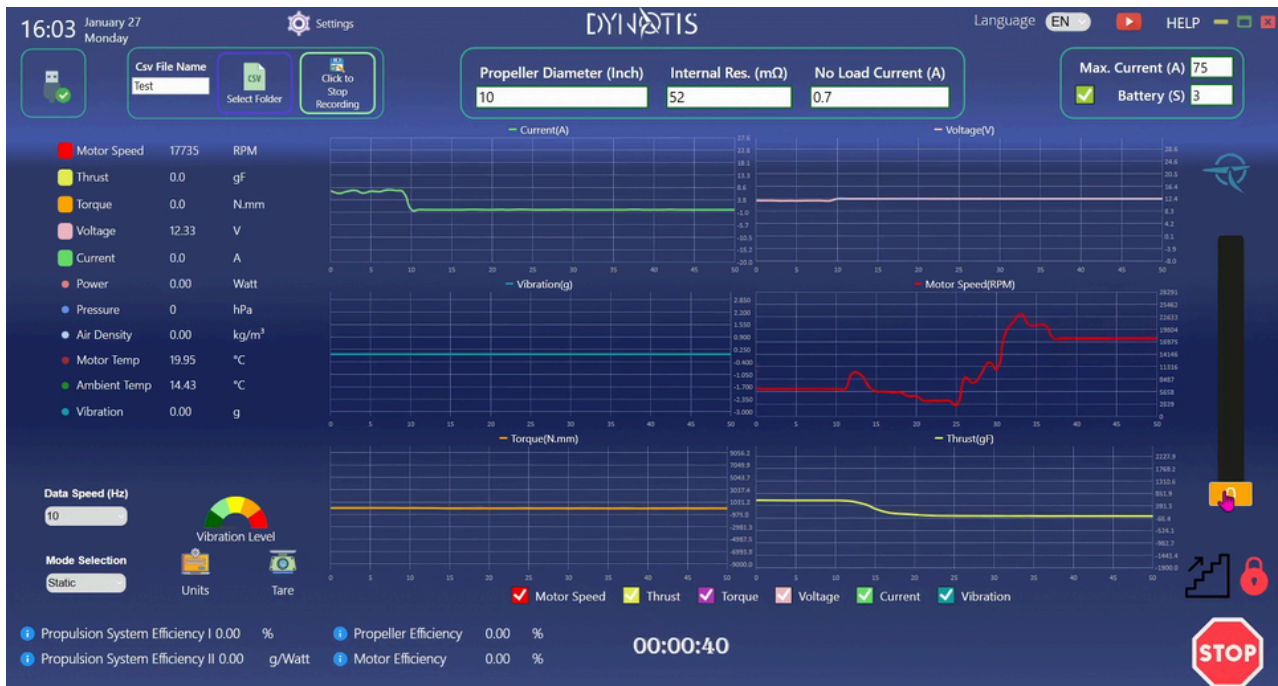
THRUST	5 kgF
THRUST ACCURACY	±1 gF
VOLTAGE	0 - 60 V
VOLTAGE ACCURACY	±0.5%
CURRENT	0 - 75 A
CURRENT ACCURACY	±0.3%
RPM	0-60000 (±1 RPM)
TORQUE	3Nm (±4%)
MOTOR TEMPERATURE	-20 ~ +350 °C
MAX PROPELLER DIA	18 inches
SAMPLING RATE	10Hz
POWER SUPPLY	5V 1A USB Type-B
OPERATING TEMPERATURE	-20°C - 50°C



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.



CUSTOMIZABLE DATA PANELS

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



MULTI-AXIS SYNCHRONIZATION

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



ANALYSIS-READY REPORTS

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



HIGH-SPEED GRAPHING

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



DATA LOGGING & EXPORT

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



LIVE ALERTS & THRESHOLDS

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



PLUG & PLAY INTEGRATION

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