



VIPER 2E

4-Channel Analyzer

The Viper 2E Vibration and Performance Analyzer is a compact instrument with all the power of the Viper and Viper 2 platforms. Designed for the harshest of environments with EMI Shielding and new cabling. Vibration and Acoustic Analysis on Jet Engines and Airframes, Transient Balance, Fan Trim Balance, and even Propeller Balance features are ready to go anywhere you are.

1

Transient Vibration Analysis

Accurate High-Speed Acceleration and/or Deceleration Transient Surveys

Powered by an internal battery and using minimal cabling, the VIPER 2E delivers vibration analysis at speed and accuracy levels typically available only in manufacturer test cells.

2

Transient Balance

Save Time and Money by Collecting Data in a Single Sweep

Transient Balance makes it possible to balance the engine from Idle to Max Power, instead of focusing only on single speed points. Test Cell quality balances on wing are possible.

3

MIL-SPEC Design

Ensure Reliability of Measurements in Harsh Environments

Designed for MIL-PRF-28800F Class 2, the VIPER 2E protects from EMI, dust, water, and impacts faced in rugged, harsh environments. All cables have been built to MIL-SPEC standards which includes EMI hardening and longer durability.

• Features

- Transient Balance yields test cell quality balancing results on-wing
- Direct PDF report generation to provide an easy summary of maintenance actions
- CSV export of raw data for further analysis
- SmartTach speed and phase processing allows direct measurement of the engine speed signal
- Four-channel simultaneous data acquisition (10 spectra/second/channel) for speed and accuracy
- Mil-Spec USB port for secure connection to encrypted Spindle Drives
- Housed in ZERO case for maximum environmental protection
- No-cost 1-year warranty for defects of components and workmanship included in the purchase price

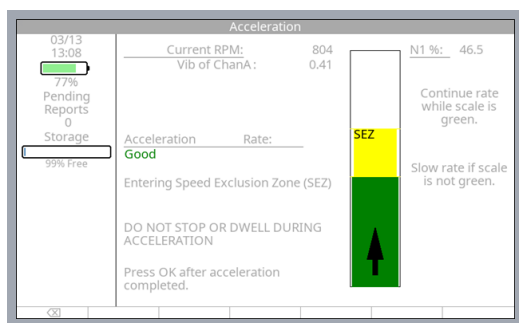




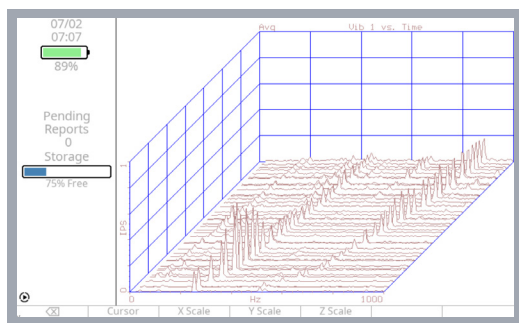
Viper 2E Specifications

APPLICATIONS

- Transient Balance
- Propeller Balance
- Fan Trim Balance
- Vibration & Acoustic Analysis
- Rotor Track and Balance



Transient Acceleration



Waterfall Plot

- **Vibration Input:**
9.5V Pk-Pk, 0 to 240 IPS Peak with 20 mV per IPS sensor
- **Sensor Types:**
Accepts any vibration signal input (acceleration, velocity, displacement, acoustic, and strain) and any voltage generating sensor.
- **Vibration Amplitude Accuracy:**
±1% across frequency range
- **Frequency Range:**
Selectable up to 30kHz (1,800,000 RPM)
- **Tachometer Inputs:**
Better than 1° phase accuracy 60 to 60,000 RPM
- **Display:**
7" Day/Night Readable Color LCD Display with Super-bright LED Backlight
- **Power:**
Smart Li-Ion Battery with 8-hour operating time
- **Operating Temperature:**
-20° to +49° C (-4° to 120° F)
- **Relative Humidity**
10-85% (non-condensing)
- **Storage**
-20° to +60° C (-4° to 140° F)
- **Dimensions:**
12 inches wide, 9 inches long, 5 inches deep
- **Weight:**
Approximately 9.0 pounds (4.1 kilograms)

ACES Systems

Knoxville, TN | USA

Ph: 865-671-2003

www.AcesSystems.com