

## Titan CDF Mini-Recorder

### Key Features:

- Very High Speed 16 Channel Data Acquisition Recorder with multi-sensor support
- Stand-alone recording to SD memory card with onboard controls for recording and calibration
- High performance analog front-end with full Balance and Calibration loopback features
- Compact size and low power consumption make the device suitable for in-vehicle applications
- GPS and Digital Sensor recording supported
- Analog Sensor inputs via DB37 connection
- Records directly to a PC via USB
- Interfaces with other Titan products to provide up to 320 analog channels, plus digital channels

### Applications:

- Durability & Fatigue
- Noise & Vibration Analysis
- Vehicle Dynamics
- Ride Quality Assessment
- Acoustics
- Shock



### Specifications:

<i>Number of Channels</i>	16 fault-tolerant channels on a rear-mounted DB37F connector
<i>Sample Rate</i>	<b>Very High Speed Operation — up to 60,000 samples per second per channel</b> Low Speed Operation — up to 1200 samples per second per channel
<i>Resolution</i>	Utilizes 24-bit A/D converters; 16-bit exported
<i>Programmable Gain</i>	From $\pm 1/16$ to $\pm 512$ ; $\pm 32V$ Full scale input voltage max.
<i>Programmable Filter</i>	10 pole Linear phase tracking filter (Very High Speed operation) 8 pole Butterworth filter (Low Speed operation)
<i>Calibration Modes</i>	Resistive (RCal): $\pm 100K$ Ohms per channel (shunt calibration) Voltage (VCal): Precision positive and negative calibration voltages provided
<i>Excitation</i>	2.048 Volts (fixed)
<i>Analog Sensor Support</i>	Full Bridge resistive type - strain gauges, load cells, accelerometers, etc. Voltage Input — up to $\pm 32$ Volts Tachometer / Totalizer (frequencies up to 7KHz) Thermocouples J, K, & T
<i>Digital Sensor Support (via Titan Digital Pod)</i>	SAE J1939, ISO 15765, 3DM-GX3 & 3DM-GX3 IMU, and multiple Wheel Force Transducer (WFT) protocols, including Kistler and Michigan Scientific
<i>GPS</i>	Optional GPS support for the Garmin 18X-5Hz w/PPS or U-Blox GNSS sensor
<i>PC Operation</i>	Remote recording and control via USB
<i>Stand-alone operation</i>	Via on-board switches
<i>Recording Media</i>	Secure Digital (SD) memory card, 2GB (furnished), up to 16GB supported
<i>Power Requirements</i>	11-32 VDC
<i>Dimensions</i>	12 cm x 10.6 cm x 3 cm (L x W x H)