

NEW!

SLICE PRO

Modular, Miniature, High-Speed Data Acquisition System

APPLICATIONS

- Acoustic studies
- Aerospace analysis
- Automotive safety
- Biomechanics
- Blast testing
- Helicopter & aircraft
- Impact testing
- Injury investigation
- Parachute deployment
- Package testing: truck, air, ship & rail
- Ride & handling
- Sound measurement
- Sports & safety equipment
- Vibration testing



SLICE PRO can record up to 1 million samples per second per channel with up to 200 kHz analog bandwidth. Shown in a 72-channel configuration, modules can be used standalone or systems can be daisy-chained for large channel count tests.

Features

- A complete standalone DAS with controller, filters, transducer excitation, gain amplifiers and 16-bit ADC
- Intuitive, easy-to-use software
- Modular, high-performance, low-mass, 100% shock tested
- Ultra-small 52 x 90 x 80 mm per 18 channel module
- User-selectable sampling rates up to 1 Msps/channel
- High bandwidth options up to 200 kHz
- Record for milliseconds to hours; data writes directly to 16 GB non-volatile flash memory
- Supports a variety of external sensor types: bridge (including MEMS, strain, load), IEPE, voltage, etc.
- Capable of measuring parameters such as force, acceleration, strain, displacement, temperature, etc.
- Compatible with DTS TDAS PRO and TDAS G5 hardware
- Meets NHTSA, FAA, ISO 6487 and SAE J211 data acquisition requirements

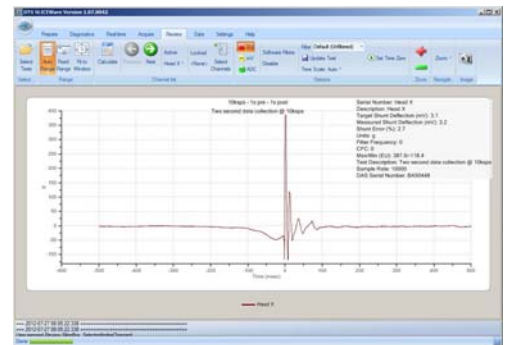
SLICE PRO is the new standard in shock-hardened, mega-sample data acquisition systems with unmatched flexibility, accuracy and reliability in an ultra-small form factor. Based on the proven architecture of SLICE, the new SLICE PRO takes every feature and function to the next level, delivering a powerful and expandable system ideal for a variety of critical test applications.



The SLICE PRO Sensor Input Module (SIM) features 9 or 18 fully-programmable sensor input channels that provide power and signal conditioning for a variety of sensor types including IEPE.

Software

SLICEWare set-up and control software offers fast, easy-to-use tools for storing sensor information and performing data collection. Includes advanced features such as automatic sensor assignment, detailed channel diagnostics, and real-time data display for successful testing and quality data every time. Supports EOX and other data exchange file formats.



PRODUCTS

Diversified Technical Systems designs and manufactures data acquisition systems and sensors for the experienced test professional.



Advanced Measurement Solutions
www.dtsweb.com

SERVICES

24/7 Worldwide Tech Support
ISO 17025 (A2LA) Calibration
Onsite Calibration & Training
Application Consulting
Software Integration
OEM/Embedded Applications

TECH CENTERS

Seal Beach, California USA
Novi, Michigan USA
Tokyo, Japan
Sydney, Australia
Zorge, Germany

Specifications

MECHANICAL

SLICE PRO SIM

Description: Sensor input module, 9 or 18 channels
Size: 52 x 90 x 80 mm
Weight: 726 g (26 oz)
Connectors: 8-pin LEMO 1B or 7-Pin Tajimi

SLICE PRO USB Controller

Description: Simple interface for start, status, event, power and USB 2.0 communication signals. Supports up to 72 channels.
Size: 52 x 90 x 80 mm
Mass: 454 g (16 oz)

SLICE PRO Ethernet Controller

Description: System interface for start, status, event, power and 10/100 Ethernet communication signals. Each Controller supports up to 72 channels and provides system compatibility with TDAS PRO & TDAS G5 and high channel count systems.
Size: 26 x 90 x 80 mm
Mass: 425 g (15 oz)

SLICE PRO Base Plate

Description: Aluminum mounting plate, 5 size options

ENVIRONMENTAL

Operating Temp.: 0 to 60°C (32 to 140°F)
Call to discuss extended temperature ranges
Humidity: 95% RH non-condensing
Shock: 100 g, 12 msec half sine

DATA RECORDING

Modes: Recorder, circular buffer and multiple test modes available
Memory: 16 GB non-volatile flash per module (128 GB available 4Q2013*)
Sample Rate: User-programmable:
250 sps to 1 Msps/ch with 9 ch. used per SIM
250 sps to 500 ksp/s/ch with 18 ch. used per SIM

TRIGGERING

Hardware Trigger: Isolated contact closure & logic-level input
Level Trigger: Software programmable from threshold level(s) set on any channel(s)
Software Trigger: Data collection may be triggered via software

*System features available 4th Quarter 2013

POWER

Internal Battery (SIM): 1 hour standalone operation standard; Requires 3-4 hours to recharge
Supply Voltage (SIM): 9-15 VDC; Note: 12-15 VDC required for charging internal battery
Power (Maximum): 15 W per 18-channel unit with 350 ohm loads and battery charging
Power Control: Push button, not impact critical
Protection: Reverse current, ESD

SIGNAL CONDITIONING

Bandwidth: DC to 200 kHz (see options in AAF section)
Input Range: ± 2400 mV to ± 0.39 mV up to 45 kHz bandwidth
 ± 1250 mV to ± 3.9 mV at 100 kHz bandwidth
 ± 500 mV to ± 15.6 mV at 200 kHz bandwidth
Noise Floor: -83 dB nominal
Gain Check: Automatic voltage Insertion
Auto Offset Range: 200% of effective input range at ranges of ± 1250 mV or less
Bridge Support: Software switchable half-bridge completion
Shunt Check: Emulation method
Sensor ID: Maxim (Dallas) Integrated silicon serial number

ANALOG-TO-DIGITAL CONVERSION

Type: 16-bit SAR ADC, one per channel

EXCITATION

Method: Individual 20 mA current-limited source, one per channel (40 mA available 4Q 2013*)
Voltage: 2.0, 5.0 V (10.0 V available 4Q 2013*)
On/Off Control: Shut down when not armed or recording

ANTI-ALIAS FILTERS (AAF)

Fixed Low Pass: 4-pole fixed Butterworth with factory configurable maximum bandwidth
Options: 4.0 kHz, 40 kHz, 100 kHz, 200 kHz (8-pole fixed Butterworth available 4Q 2013*)
Adjustable Low Pass: 5-pole Butterworth set under software control: 50 to 40 kHz (can also be bypassed)
Overall Response: Filters may be used together to achieve 9-pole effective response. Call to discuss any special requirements. (13-pole effective avail. 4Q 2013*)
SAE J211: System response complies with SAE J211 / ISO 6487 recommended practices

SOFTWARE

Control: SLICEWare, DataPRO, API
Operating Systems: Windows® XP/Vista/7/8 (32/64-bit)
Communication: USB or Ethernet interface

ORDERING INFORMATION

CONTROLLER:

13000-30601 SLICE PRO USB Controller
13000-30610 SLICE PRO Ethernet Controller

CABLE KIT:

13000-40331 SLICE PRO USB Controller & Cable Kit

MODULE:

13000-70139 SLICE PRO SIM (9 ch) (LEMO 1B)
13000-70140 SLICE PRO SIM (9 ch) (Tajimi)
13000-70239 SLICE PRO SIM (18 ch) (LEMO 1B)
13000-70240 SLICE PRO SIM (18 ch) (Tajimi)

BASEPLATE:

13000-40340 USB + 4 SIM Baseplate
13000-40350 USB + 2 SIM Baseplate
13000-40380 USB + 1 SIM Baseplate
13000-40360 Ethernet + 4 SIM Baseplate
13000-40370 Ethernet + 2 SIM Baseplate

SOFTWARE:

10920-03002 SLICEWare

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Specifications subject to change without notice.