

APPLICATIONS

- Blast testing
- Fuze validation
- Crash testing
- Gun launch
- Drop testing
- Missile/Ordnance
- Parachute deployment

SLICE HG

High Impact, 3-Channel Data Recorder 50000 g, 120 ksps/channel



SLICE HG is a self-contained, 3-channel data acquisition system. It records up to 120000 samples per second per channel and is shock rated to 50000 g. SLICE HG is available in two enclosure options and can be daisy-chained to create a 12-channel system.

Features

- Compact, rugged enclosure options:
Puck Enclosure: 47.63 DIA x 26.49 mm (1.875" DIA x 1.043")
Tube Enclosure: 31.75 DIA x 42.52 mm (1.250" DIA x 1.674")
- Reliable and durable: shock rated to 50000 g
- Records up to 120 ksps/channel
- Supports a variety of external sensors interfaces including:
3- and 4-wire bridge, MEMS sensors, strain & load & voltage
- Options for embedded single-axis angular rate (spin) sensor or a triaxial accelerometer
- Modular: SLICE HG can be daisy-chained to create up to a 12-channel system
- 7 GB flash memory: >2 hours of data storage time at maximum sampling rate
- Low power; 9-15 VDC, battery backup
- Multiple sleep and trigger options

SLICE HG is a high-speed, rugged data recorder designed to collect critical field and survivability data. Ultra-small and compact, SLICE HG can be embedded in a variety of applications without significant installation or retrofit modifications. Set-up and data download for analysis is easy and intuitive.

The foundation of the system is the Base SLICE that contains the microprocessor, memory and all control circuits for managing the 3-channel Bridge SLICE.

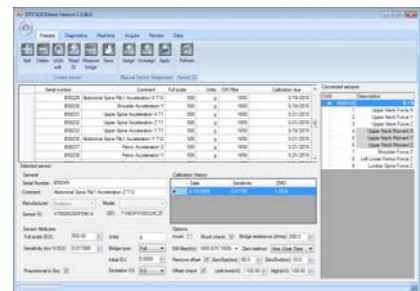
A simple interface provides power, trigger and communication signals for chaining multiple SLICE HG systems and connecting to your PC.

SLICE HG can also be configured with an embedded DTS ARS (angular rate sensor) or triaxial accelerometer.



Software

SLICEWare set-up and control software provides fast, easy-to-use tools for storing sensor information and performing data collection. Advanced features such as automatic sensor assignment, detailed channel diagnostics, and real-time data display support successful testing and quality data every time.



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
Sydney, Australia
Shanghai, China
Zorge, Germany
Tokyo, Japan

Specifications

PHYSICAL	
Size:	Puck 47.63 DIA x 26.49 mm (1.875" DIA x 1.043") Tube 31.75 DIA x 42.52 mm (1.250" DIA x 1.674")
Weight:	Puck 120 g (4.23 oz) Tube 85 g (3.00 oz)
Connectors:	
Comm/Power/Chain:	Omnetics, circular locking, 12-pin
Sensors:	Omnetics, circular locking; 3 single-channel 7-pin or 1 three-channel 16-pin

ENVIRONMENTAL	
Operating Temp.:	0 to 60°C (32 to 140°F) Call to discuss extended temperature ranges
Humidity:	95% RH non-condensing
Shock:	50000 g

DATA RECORDING	
Modes:	Recorder or circular buffer modes available
Memory:	7 GB non-volatile flash
Sample Rate:	Up to 120 ksps/channel

TRIGGERING	
Hardware Trigger:	Isolated contact closure & logic-level input
Level Trigger:	Software programmable from any channel

POWER	
Supply Voltage:	9-15 VDC; >11 VDC when charging backup battery
Current (Maximum):	250 mA including excitation voltage for sensors
Power Control:	Remote power control input for on/off
Protection:	Reverse current, ESD

BACKUP BATTERY	
Charge Status:	Backup battery charges when input voltage to Base SLICE is greater than 11 VDC
Charge Time:	~30 min. from complete discharge to full charge (100 mA at input connector on Base)
Discharge Rate:	~3 minutes

SIGNAL CONDITIONING	
Number of Channels:	3 differential, programmable
Input Range:	±2.4 V (2.5 V center)
Bandwidth:	DC to 40 kHz, programmable
Gain Range:	1.0-1280, programmable
Auto Offset Range:	100% of effective input range
Bridge Support:	Software switchable completion
Shunt Check:	Emulation method

ANALOG-TO-DIGITAL CONVERSION	
Type:	16-bit SAR, one ADC per channel

EXCITATION	
Method:	One 20 mA current-limited source/channel
Voltage:	5.0 V
On/Off Control:	Shut down when not armed or recording Opt. pulsed excitation for low sampling rates

ANTI-ALIAS FILTER	
Fixed Low Pass:	4-pole Butterworth, standard knee frequency of 40 kHz
Adjustable Low Pass:	5-pole Butterworth set under software control, 50 Hz to 40 kHz
Overall Response:	Both filters may be used together to achieve 9-pole effective response
SAE J211:	System exceeds SAE J211 response

SOFTWARE	
Control:	SLICEWare, API
Operating Systems:	Windows® XP/Vista/7
Communication:	USB; optional Ethernet interface



SLICE HG is based on the original SLICE technology, a COTS miniature data acquisition system developed by DTS.

Authorized DTS Representative:



Diversified Technical Systems, Inc.
Electric Ave., Suite 206
Seal Beach, CA 90740 USA
Phone: +1 562 493 0158
Email: sales@dtsweb.com
www.dtsweb.com

Specifications subject to change without notice.