

MEETS SPECIFICATIONS FOR  
EU & US NCAP TESTING

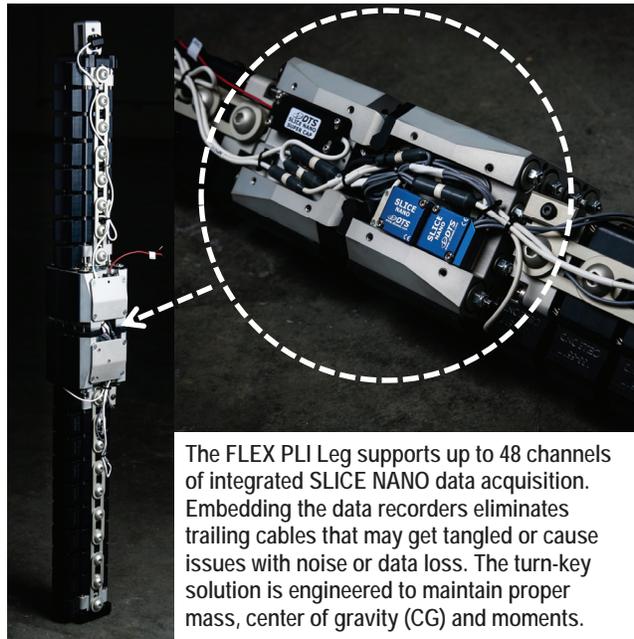
## SLICE Flexible Pedestrian Legform Impactor

### Integrated Data Acquisition for Cable-Free Operation

#### APPLICATIONS

- Flexible Pedestrian Legform Impactor

SLICE NANO also works with Free Motion and Pedestrian Headforms



The FLEX PLI Leg supports up to 48 channels of integrated SLICE NANO data acquisition. Embedding the data recorders eliminates trailing cables that may get tangled or cause issues with noise or data loss. The turn-key solution is engineered to maintain proper mass, center of gravity (CG) and moments.

The SLICE Flexible Pedestrian Legform Impactor integrates the ultra-small SLICE NANO data acquisition system into a cable-free solution for pedestrian safety testing. Offering the ultimate in flexibility and reliability, the legform is armed via a PC, disconnected, then powered and launched any time without trailing cables. The system can be triggered with a level trigger or contact closure and data writes directly to flash memory. A quick-charging super capacitor ensures reliable data capture and storage during the launch event.



#### Features

- Cable-free operation
- Engineered to assure proper mass, CG and moments
- Level trigger or contact closure
- Supports up to 48 channels of SLICE NANO data acquisition
- Super capacitor powered during launch
- Data writes directly to 16 GB flash memory
- Intuitive, easy-to-use software
- Complies with ISO 6487 and SAE J211 recommended practices, as well as NHTSA and FAA requirements

#### Software

DTS offers two powerful software options for the SLICE legform. SLICEWare provides fast, easy tools for storing sensor information, performing data collection, viewing and exporting data. DataPRO is a fully-featured software package with a comprehensive database and user interface for tracking sensor information, creating test objects and test setups, performing diagnostic routines, and conducting tests. Both software packages offer the most advanced self-diagnostics, plus support for EQX, ISO MME and many other data exchange file formats.

#### PRODUCTS

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



**DTS**

[www.dtsweb.com](http://www.dtsweb.com)

DSH-022 (Rev 08.2017)

## SERVICES

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

## WORLDWIDE SUPPORT

HELP CENTER (24/7/365 Access)  
DTS Technical Centers  
Global Sales Partners

## HEADQUARTERS

Seal Beach, California USA

## CONTACT US

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## Specifications



### BASE+ SLICE NANO

One (1) required per stack – system microprocessor & memory

Size: 26 x 31 x 6.5 mm (1.02 x 1.22 x 0.26")  
Weight: 14.2 g (0.50 oz)  
Connectors: Omnetics, circular locking, 12-pin



### BRIDGE SLICE NANO

Three (3) inputs for external sensors

Size: 26 x 31 x 5.5 mm (1.02 x 1.22 x 0.22")  
Weight: 13.8 g (0.49 oz)  
Connectors: Omnetics, circular locking; 3 single-channel 7-pin or 1 three-channel 16-pin



### SUPERCAP+

Designed specifically for the Pedestrian Legform

Size: 55 x 15 x 22 mm (2.2 x 0.6 x 0.87")  
Weight: 27 g (0.95 oz)  
Charge Time: ~2 minutes  
Discharge Rate: >3 seconds for 12 channels  
>1.5 seconds for 24 channels

## SIGNAL CONDITIONING

Number of Channels: 3 differential, programmable  
Input Range: ±2.4 V (2.5 V center)  
Bandwidth: DC to 35 kHz, programmable  
Gain Range: 1.0-1280, programmable  
Auto Offset Range: 100% of effective input range  
Bridge Support: Software controlled half-bridge completion  
Shunt Check: Emulation method, automatically calculated  
Sensor ID: Maxim Integrated (Dallas) silicon serial number  
Linearity (typical): ≤0.2% (gain 1 to 320), ≤0.5% (gain >320)  
Accuracy: 0.5% including reference uncertainty

## ANALOG-TO-DIGITAL CONVERSION

Type: 16-bit SAR (Successive Approximation Register) ADC, one per channel, simultaneous sample of all channels

## EXCITATION

Method: Independent regulator for each channel  
Voltage: 5.0 V, up to 20 mA, short circuit safe  
Power Management: Shutdown when not armed or recording

## ANTI-ALIAS FILTER

Fixed Low Pass: 4-pole Butterworth, standard knee frequency at 40 kHz  
Adjustable Low Pass: 5-pole Butterworth set by software from 1 Hz to 35 kHz  
Response: Meets SAE J211/ISO6487 response corridors

## SOFTWARE

Control: SLICEWare, DataPRO  
Operating Systems: Windows® 7/8/10 (32- and 64-bit)  
Communication: USB

## Ordering Information

The DTS Flexible Pedestrian Legform Impactor kit can be customized for specific requirements – see available options below.  
Contact [sales@dtsweb.com](mailto:sales@dtsweb.com) for more information.

| Choose FLEX System Kit   | DTS Part Number | Description +                         |
|--|-----------------|---------------------------------------|
|  | 13000-40070     | SLICE NANO 12-channel FLEX System Kit |
|  | 13000-40080     | SLICE NANO 15-channel FLEX System Kit |
|  | 13000-40090     | SLICE NANO 18-channel FLEX System Kit |
|  | 13000-40100     | SLICE NANO 24-channel FLEX System Kit |
| Kit Includes: SLICE NANO BASE, NANO Bridges, Supercap+, NANO Stack Extender, SLICE FLEX quick-release bracket, sensor connector assemblies |                 |                                       |

| Choose Launcher integration kit  | DTS Part Number | Description                                   |
|--|-----------------|---|
|  | 13000-40110     | SLICE FLEX Launcher Integration Kit, USB      |
|  | 13000-40130     | SLICE FLEX Launcher Integration Kit, Ethernet |
| Kit Includes: SLICE USB or Ethernet Interface, SLICE UI/EI NANO chain, SLICE FLEX quick release, SLICE FLEX latching chain |                 |   |

| + Add Software (if not already owned) | DTS Part Number | Description |
|---------------------------------------|-----------------|-------------|
|                                       | 10920-03002     | SLICEWare   |
|                                       | 10920-04010     | DataPRO     |



Specifications subject to change without notice.  
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