

APPLICATIONS

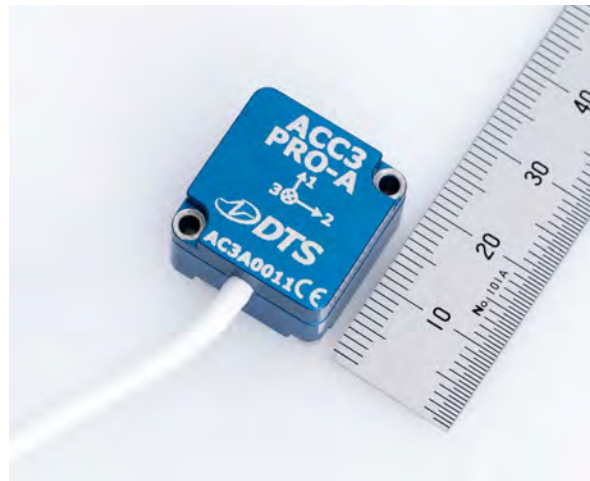
- Aerospace analysis
- Amusement ride testing
- Automotive safety
- Biomechanics
- Blast testing
- PMHS (cadaveric) testing
- Embedded monitoring
- Helicopter & aircraft
- Impact testing
- In-dummy
- Injury investigation
- Parachute deployment
- Package testing: truck, air, ship & rail
- Pedestrian head & leg form
- Ride & handling
- Sports & safety equipment
- Vibration testing

PRODUCTS

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

ACC3 PRO-A

Ultra-Small, Rugged, Triaxial Accelerometer with DC Response



Designed for applications measuring acceleration up to 500 g, the DTS ACC3 PRO-A combines three accelerometers in a compact 19 x 19 x 12.5 mm package. A single cable contains three high-level, differential voltage outputs.

Features

- Ultra-compact and lightweight
- Ideal for high acceleration measurements
- Range: ± 500 g
- DC response and shunt-checkable like a standard bridge
- IP67 Rated for dust protection and water immersion
Sealed enclosure is also ideal for PMHS work.
- DTS re-calibration services available. NIST traceable and ISO accredited.
- Complies with NHTSA, FAA, ISO 6487 and SAE J211 recommended practices.

The high-performance DTS ACC3 PRO-A features three linear accelerometers conveniently packaged in a compact, rugged enclosure. Designed to meet the rigorous demands of dynamic testing environments, the ACC3 PRO-A is ideal for high shock environments including automotive, aerospace, and industrial impact test applications.

Pair it with the ARS3 PRO angular rate sensor to create a complete 6-degree-of-freedom sensor package.



Standard sensor cable is 7 meters (23 feet) long and terminates to a single triaxial connector. Pigtail or adapter cables are available to support a variety of termination options.

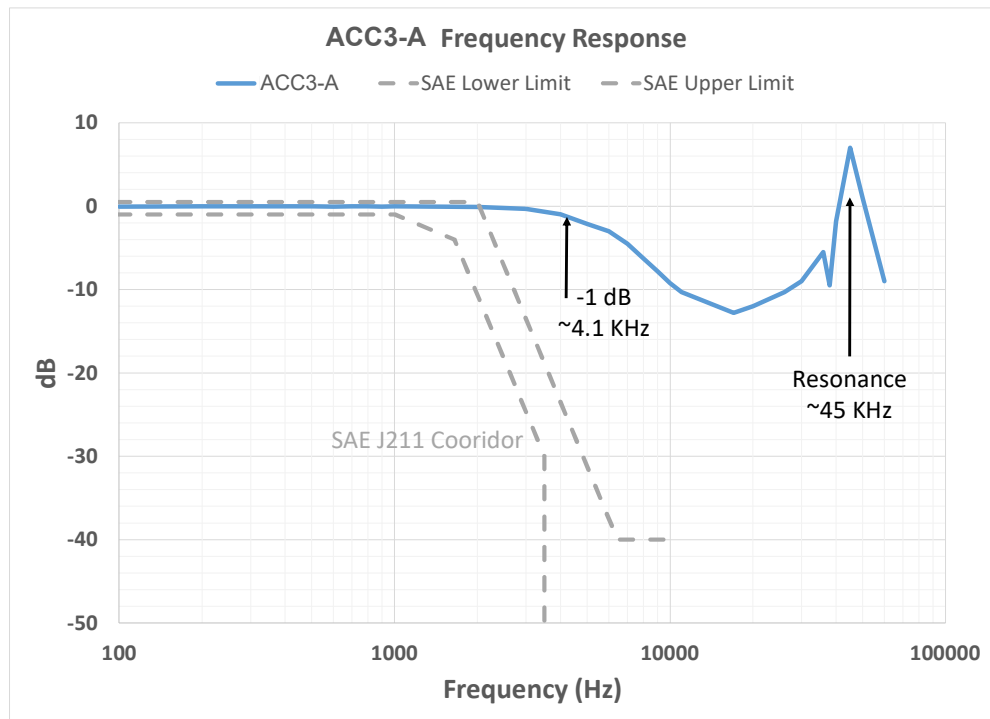


Specifications

PHYSICAL		ENVIRONMENTAL	
Size:	19 x 19 x 12.5 mm (0.75 x 0.75 x 0.49")	Operating Temp.:	-40 to +85°C (-40 to +185°F)
Mass:	10 g (0.35 oz.) without cables	Humidity:	99%, non-condensing, sealed
Enclosure:	Anodized aluminum	Shock:	10000 g, any direction
Mounting Holes:	Thru-holes for two 2-56 or M2 bolts	IP Rating:	IP67
ACCELEROMETER PERFORMANCE		CONNECTORS	
Range:	±500 g	Type:	Standard: triax 16-pin Omnetics connectors with Dallas ID (23 ft). Optional: Adapter cable with pigtailed or connectors of choice (2 ft).
Bandwidth:	0-5000 Hz, DC response		
Linearity - % FS:	< 1%		
Transverse Sensitivity:	3% (max), 2% (typical)		
Damping Ratio:	0.7 nominal		
Noise Density:	125 µg/√Hz		
Nominal Sensitivity:	3.75 mV/g		
Zero Output:	±3% FS (max)		
Thermal Zero Shift:	±0.01% FS/°C (-40 to +85°C)		
Thermal Sens. Shift:	±0.1 %/°C typ (-40 to +85°C)		
Shunt Check:	3000 Ω equivalent bridge resistance		
Excitation Voltage:	4.9-14 V, not proportional to excitation		
Current:	2 mA nominal per axis		
CALIBRATION			
Acceleration:	NIST traceable shock, half-sine		
Calibration:	Re-calibration services available		

SERVICES

24/7 Worldwide Tech Support
ISO 17025 (A2LA) Calibration
On-site Calibration & Training
Application Support
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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The ACC3 PRO-A is available with an adapter plate to match common mounting methods for a variety of applications including aerospace and motorsports.

DTS
www.dtsweb.com

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