

## ASC 4421 → ASC 4425

New Generation  
Uniaxial  
3 or 4 wire system  
Amplified Output  
Aluminium Housing

New Generation  
Uniaxial  
3 or 4 wire system  
Amplified Output  
Stainless steel Housing



### Features

- Range: 2g to 200g
- High Shock Resistant
- Gas damping
- DC response
- ASCteds Module

### New Generation:

- Excellent Bias Stability
- Excellent Scale Factor Stability
- Low Power Consumption
- Low Noise

### Options

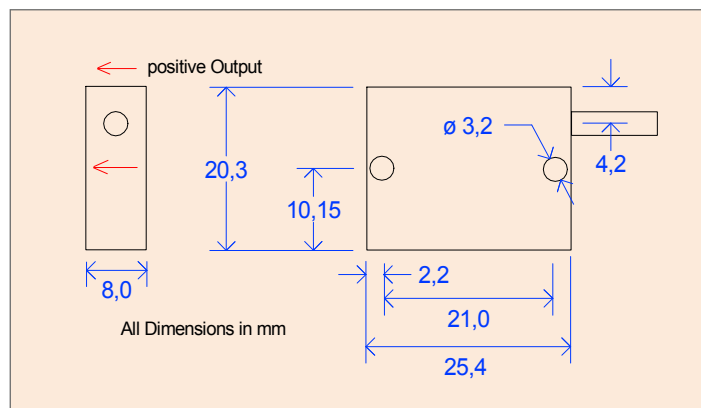
- customized cable length
- customized connector
- ASCteds Data Identification Module
- Dallas Sensor ID

### Service

- Pendulum calibration
- Sinusoidal calibration

### Applications

- Train Control and Train Engineering
- Wind-Energy Engineering
- Automotive
- Aerospace flight & flutter testing
- Mechanical Engineering
- Truck Testing
- Geophysics



### Description

The models **ASC 4421** and **ASC 4425** are uniaxial accelerometers based on capacitive technology. Both ASC accelerometers are manufactured with an **improved chip technology**. The **ASC 4421** and **ASC 4425** therefore benefit from the high stability of the new chip technology with a low noise level and a low bias and scale factor temperature coefficient.

The sensor has been developed specifically for measuring relatively small accelerations, as required in the aerospace or automotive sector, for example. The **ASC 4421** and **ASC 4425** are shock resistant up to at least 6,000 g. Both versions require a supply voltage of between 8 to 30 VDC. The +/- 2 VDC is DC coupled at a DC bias of 2.5 V. The amplified output is easy to use with all common data acquisition units. The stainless steel package of the **ASC 4425** provides a high resistance to strong environmental influences.

A very high flexible and rugged cable provides a simple mounting. The **ASC 4421** as well as the **ASC 4425** are equipped as standard with 6 m shielded cable.

## General Technical Data

Supply Voltage		8 VDC - 30 VDC
Operation Current max.		2 mAmp
Linearity:typ. FSO		< 0.8%
Damping Ratio typ.		0.7
Transvers Sensitivity: typ.		2%
Signal Output		+/- 2,000 VDC FSO
Zero Output		2,500 mV +/-10 mV
Reference Output		2,500 mV
Output Impedance		10 kOhm
TC Span		all 100 ppm/°C typ.
Noise		17 µVRootHz
Shock Resistant		7,000g
Operating Temperature		-20° C to +100° C
Storage Temperature		-40° C to +120° C
Weight	Housing	<b>ASC 4421:</b> 10 gram <b>ASC 4425:</b> 20 gram
	Cable	12 gram/meter
Material	Housing	<b>ASC 4421:</b> Aluminium, hard anodized <b>ASC 4425:</b> Stainless steel
	Cable	4 wire shielded, AWG 30, Polyuithan (PU), diameter 3.0 mm
Housing	dimensions	25.4 x 20.3 x 7.5 mm

At 5 VDC Supply and 25° C

## Individual Technical Data

Range +/-2 g	Sensitivity	1000 mV/g
	Frequency +/- 5%	100 Hz
	TC Zero	0.1 mg/° C typ.
Range +/-5 g	Sensitivity	400 mV/g
	Frequency +/- 5%	100 Hz
	TC Zero	0.3 mg/° C typ.
Range +/-10 g	Sensitivity	200 mV/g
	Frequency +/- 5%	150 Hz
	TC Zero	0.5 mg/° C typ.
Range +/-30 g	Sensitivity	66 mV/g
	Frequency +/- 5%	1,000 Hz
	TC Zero	1.5 mg/° C typ.
Range +/-50 g	Sensitivity	40 mV/g
	Frequency +/- 5%	1,500 Hz
	TC Zero	2,5 mg/° C typ.
Range +/-100 g	Sensitivity	20 mV/g
	Frequency +/- 5%	1,500 Hz
	TC Zero	5,0 mg/° C typ.
Range +/-200 g	Sensitivity	10 mV/g
	Frequency +/- 5%	1,700 Hz
	TC Zero	10 mg/° C typ.

Cable Code:

Red      Supply +      Green      Signal +  
Black    Supply -      White      Signal -

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## Order Information

### ASC 4421-XXX-6XX

①      ②      ③      ④

- ① Model: ASC 4421: aluminium; ASC 4425: stainless steel
- ② Range: e.g. 050 is 50g
- ③ Cable: Length in Meter
- ④ Connector and Pinout / „A“ is for No Connector