

Typical Specifications

LOW-NOISE MODELS: UNIAXIAL ASC CS-1711LN ; BIAXIAL: ASC CS-1511LN ; TRIAXIAL: ASC CS-1611LN

DYNAMIC

		Measurement Range (\pm g)			
		\pm 2g	\pm 5g	\pm 10g	\pm 50g
Sensitivity	mA/g	4	1.6	0.8	0.16
Frequency response: \pm 5%	Hz	100		300	650
Amplitude non-linearity	% FSO		<1		
Transverse sensitivity	%		<3		
Shock limit	\pm g	1000		2000	
Recovery time	ms		1		

ELECTRICAL

Excitation voltage	V DC	8 to 30			
Zero acceleration output	mA	12			
Output Impedance	Ω	100			
Isolation		Case Isolated			
Spectral noise (typical)	μ g/ \sqrt Hz	10	15	20	100
Broadband noise (\pm 5% frequency range, typical)	μ V	0.4	0.2	0.3	0.4

ENVIRONMENTAL

Temperature coefficient of sensitivity	%/ $^{\circ}$ C	0.02			
Operating temperature range	$^{\circ}$ C	-20 to +70			
Storage temperature range	$^{\circ}$ C	-30 to +80			
Sealing		IP67			

PHYSICAL

Sensing element	MEMS Capacitive				
Case material	Anodised Aluminium				
Connector	Cable gland (Binder / Comtronic)				
Mounting	M3 / M5 Screws				
Weight (without cable)	gram	Uniaxial: 27 Biaxial: 35 Triaxial: 65			
Cable	Uniaxial: 2m, PVC (2 x 0.5mm ²) Biaxial: 2m, PVC (4 x 2 x 0.22mm ²) Triaxial: 2m, PVC (6 x 0.25mm ²)				

FACTORY CALIBRATION (SUPPLIED WITH THE SENSOR)

Low-noise series: ASC CS-1711LN; ASC CS-1511LN; ASC CS-1611LN

Range	±2g	±5g	±10g	±50g
Frequency Response	1Hz to 100Hz		10Hz to 300Hz	10Hz to 650Hz

CALIBRATION DIN ISO 17025 (ORDER SEPARATELY)*

Low-noise series: ASC CS-1711LN; ASC CS-1511LN; ASC CS-1611LN

Range	±2g	±5g	±10g	±50g
Frequency Response	0.5Hz to 150Hz		10Hz to 500Hz	10Hz to 1.6kHz

CABLE CODE / PIN CONFIGURATION

ASC CS-1711LN

<i>Uniaxial, 3-wire</i>		<i>Supply +</i>
		<i>Supply -</i>
		<i>Signal</i>

ASC CS-1511LN

<i>12-wiring-System</i>	<i>X-Axis</i>	<i>Y-Axis</i>
	<i>Supply +</i>	<i>Supply +</i>
	<i>Supply -</i>	<i>Supply -</i>
	<i>Signal</i>	<i>Signal +</i>

ASC CS-1611LN

<i>12-wiring-System</i>	<i>X-Axis</i>	<i>Y-Axis</i>	<i>Z-Axis</i>
	<i>Supply +</i>	<i>Supply +</i>	<i>Supply +</i>
	<i>Supply -</i>	<i>Supply -</i>	<i>Supply -</i>
	<i>Signal</i>	<i>Signal +</i>	<i>Signal +</i>

ORDERING INFORMATION

Model	Range	Cable length	Connector	Protection class
ASC CS-1711LN	XXX	YYY	A: open-ended cable (no connector at the DAQ end)	IPXX
	002: ±2g	050: 50m		IP67 (standard)
ASC CS-1511LN	005: ±5g	100: 100m	Contact factory for all available	IP68
	010: ±10g	150: 150m	connector options such as Lemo,	
ASC CS-1611LN	050: ±50g	200: 200m	BNC etc.	

QUALITY

- 1) ASC is ISO 9001:2015 certified
- 2) The Deutsche Akkreditierungsstelle GmbH (DAkkS) has awarded to our calibration laboratory the DIN EN ISO/IEC 17025:2005 accreditation for calibrations and has confirmed our competence to perform calibrations in the field of mechanical acceleration measurements.