

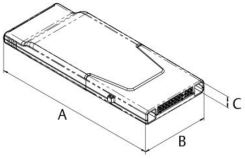
VI Piezo CHARM

VI Piezo CHARM is a single channel measuring module for the connection of a 2-wire piezoelectric sensor according to the ICP® standard. VI Piezo CHARM converts the analog measuring data provided by the connected sensor into a digital signal. This signal is pre processed and provided to the processor of the system where the CHARM is installed. Parameters for the pre processing of the measuring data are software configurable. PeakVue™ is supported by this CHARM. VI Piezo CHARM can be installed in AMS Asset Monitor only. The standard CHARM terminal Block KL4502X1-BA1 is required for the installation.



Electrical Data		
Supply		
Sensor Supply Current	1 to 8 mA	± 5%, ± 75µA
Sensor Excitation Voltage	>20 VDC	
Charm Power Requirements	25 mA @ 24 VDC	
Charm Power Dissipation	0.6 W	
Signal Input		
Sensor Types	2-wire ICP®	
Nominal Signal Range	-24 to +24V	
Full Signal Range	-28V to +28V	
Input Frequency Range	0 to 40 kHz	Attenuation < 3 dB
Dynamic Range	> 99 dB	
Input Impedance	>100 kΩ	
A/D Resolution	24 bit A/D converter	
Accuracy		
Basic Accuracy	±0.8%, ±5.0 mV	
Accuracy Over Temperature	±0.5%, ±5.0 mV	



Environmental Conditions and Mechanical Design		
Environmental Conditions		
Operating Temperature	-40 to +70°C	
Storage Temperature	-40 to +85°C	
Humidity	5 to 95%	Noncondensing
Ip Protection Class	IP 20	According to IEC 60529
Shock	150 m/s ²	According to IEC 60068-2-27, 4000 shocks per axis
Vibration	0.15 mm	10 to 58.1 Hz
	20 m/s ²	58.1 to 150 Hz
	Floating sinus, 20 cycles, three axes	According to IEC 60068-2-6
Operating Altitude	< 2,000 m	Above sea level
Mechanical Data		
Status Indication	LED	One red/green bicolored LED
Weight	< 40 g (0.1 lb)	Without packaging
Dimensions	A = 116 mm (4.57 in) B = 47 mm (1.85 in) C = 11 mm (0.43 in)	
Compliance and Certifications		
CE	2014/30/EU (EN 61326-1) 2014/34/EU (EN 60079-0, EN 60079-11, EN 60079-15, DEKRA EXAM GmbH) 2011/65/EU (DIN EN 50581)	
CSA	CAN/CSA C22.2 No. 61010-1-12, UPD1:2015, UPD2:2016 UL Std. No. 61010-1 (3rd Edition) CAN/CSA C22.2 No. 60079-0:19 CAN/CSA-C22.2 No. 60079-11:14 CAN/CSA-C22.2 No. 60079-15:16 Class I Division 2 Groups ABCD T4 Class I Zone 2 A/Ex ec IIC T4 Gc	
IEC Ex	Ex ec nA nC [ic] IIC T4 Gc Ex tb [ic] IIIC T75°C Db	
ATEX	II 3G Ex ec nA nC [ic] IIC T4 Gc II 2D Ex tb [ic] IIIC T75°C Db	

Compliance and Certifications	
Marine	DNV GL rules for classification - Ships, offshore units, and high speed and light craft
RoHS, REACH	

Only specifications with indicated tolerances or limit values are required. Data without tolerances or without error limits are informative data and not guaranteed. Technology is under constant development and specifications are subject to change without notice. If not otherwise specified, all data refer to a nominal supply voltage of 24 VDC and an environmental temperature of 23°C (73°F).

Ordering Information

Model Number	Product Description
SE8701V01-PZ	AMS Asset Monitor VI Piezo CHARM

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