# **IEPE Signal Conditioner**

#### MICHEP M208B MI



## Application

- Signal conditioning in laboratory or field with IEPE compatible piezoelectric sensors for acceleration, force or pressure and IEPE
- Front end for PC based data acquisition systems

## Properties

- Low cost solution for multichannel applications
- Wide frequency range from 0.1 Hz to 100 kHz
- Plug-in high pass, low pass and integrator modules
- Shared output for outputs 1 to 8 at rear panel
- Overload and sensor indicator LEDs for each channel
- Operation with mains plug adapter or DC supply
- 19" rack mounting enclosure with low depth



#### **Technical Data**

Measurands	Vibration acceleration	
	Vibration velocity/severity; with FBV integrator module	
	Vibration displacement; with FBD integrator module	
Voltage gain	1; 10; 100; 1000	
Gain selection	Push buttons	
Accuracy	$\pm 1$ (5 to 100 % full scale; band center; 0 to 30°C )	%
Cross-talk attenuation	>80	dB
Output noise	<0.4 (0 dB; 0.1 to 30000 Hz )	mVRMS
	<5 (20 dB; 0.1 to 30000 Hz )	mVRMS
	<6 (40 dB; 0.1 to 30000 Hz )	mVRMS
	<10 (60 dB; 0.1 to 30000 Hz )	mVRMS
Lower frequency limit acceleration	0.1	Hz
Lower frequency limit velocity	3 (with FBV integrator module)	Hz
Lower frequency limit displacement	5 (with FBD integrator module)	Hz
Upper frequency limit acceleration	100 to 100000 (with FB2 low pass module)	Hz
Upper frequency limit velocity	1000 (with FBV integrator module)	Hz
Upper frequency limit displacement	200 (with FBD integrator module)	Hz
Indication	Graphical LCD for setup	
	2 gain LEDs per channel	
	8 IEPE LEDs: OK; cable break; short circuit	
	8 LED for overload	

Connectors		
Input channels	8	
Input signals	IEPE	
	AC voltage	
Input connector	8 x BNC front	
IEPEconstant current	3.5 to 4.5	mA
Output connector	8 x BNC front	
	±10 V	
	Impedance <100 $\Omega$	

Power Supply		
External supply voltage	10 to 28	VDC
External supply current	<1500	mA
Supply connection	DIN 45323; 1.9 mm; rear	

#### Case Data

Dimensions without connectors	483 x 44 x 124 (W x H x D)	mm
Case material	Aluminum, hard anodized	
Weight	1700	g
Operating temperature range	-10 to 50 (95 % rel. humidity without condensation)	°C

Scope of delivery

Mains plug adapter 115/230 VAC; 15 VDD; <1600 mA

Optional accessories FB2-xx low pass modules FB3-xx high pass modules FBV single integrator module FBD double integrator module



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