Model 485B39

DIGITAL ICP® - USB SIGNAL CONDITIONER

Benefits

- Easily acquire, save, and share data on-the-go
- Portable sensor digitization
- Plug & play — no driver installation
- High-quality, 24-bit, broad-frequency measurements
- 2-channel ICP (IEPE) sensor inputs
- Direct compatibility with MATLAB®, LabVIEW™, and a variety of signal analysis programs from time to waveform, to RMS, to FFT, and more
- Windows, iOS, Android, macOS, and Linux ready

Applications

- General dynamic signal digitizing
- Binaural recordings
- Sound & vibration measurements: isolation, transmissibility, and correlation studies
- Resonance testing
- Educational laboratory experiments

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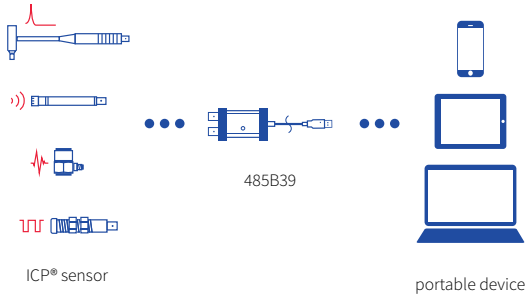
More Product Information at www.modalshop.com/ICPD

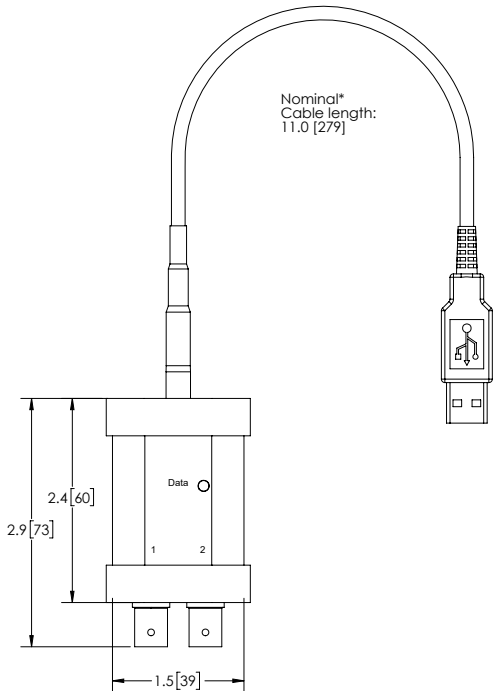
A pocket-sized, dual-channel ICP® (IEPE) digital signal conditioner, Model 485B39 offers standard USB audio digital output. Plug & play signal conditioning makes for quick setup and intuitive functionality without the need for driver installation. The 485B39 powers ICP sensors through BNC connections while digitizing their signals over USB. Simply plug the unit into a USB port and view signals from accelerometers, microphones, hammers, or any other ICP-type sensor.

Existing third party Windows®, iOS®, Android™, macOS®, or Linux® software can be used to acquire time waveforms, frequency spectra, overall RMS measurements, and octave measurements or simply record data for further analysis. The small form factor, versatility, and powerful software options make this the perfect tool for taking measurements on-the-go. Whether you're just learning about sensing; taking measurements on a daily basis; or simply want to add digital, portable functionality to your existing sensors; the 485B39 is a practical addition to your tool set.



MODEL 485B39 SPECIFICATIONS	
Performance	**Specification**
Channel Count	2
Voltage Range (Nominal)	± 10 V pk [1]
ADC Resolution	24-bit[2]
Frequency Range (± 5 %)	0.8 Hz to 20.7 kHz
Sample Rate	48, 44.1, 32, 22.05, 16, 11.025, 8 kHz
Antialiasing Lowpass Filter (-3 dB) at 48 kHz	22.9 kHz[3]
AC High Pass Filter (-3 dB) (48 kHz to 8 kHz)	1 Hz to 0.5 Hz[4]
Digital Output Interface	USB Class 1 Audio
Physical	**Specification**
Temperature Range (Operating)	14 °F to +176 °F (-10 °C to +80 °C)
Temperature Range (Storage)	-40 °F to +176 °F (-40 °C to +80 °C)
Excitation Voltage to Sensor (± 5 %)	24 V DC
Constant Current Excitation (± 5 %)	4 mA
DC Power (USB)	< 500 mW (5 V at 100 mA)
Settling Time	1.5 s
Electrical Isolation (case)	Grounded
Data / Power Indicator	Green LED
Housing Material	Stainless Steel
Size (length x width x height)	2.36″ x 1.5″ x 0.9″ (60 mm x 38 mm x 23 mm)
Weight	4.4 oz (125 grams)
Sensor Inputs	2 BNC jacks
Digital Output	11″ Integral Cable (28 cm Integral Cable)
USB Connector	Type A
Optional Accessories	
MD821AM/A USB A to Lightning camera adaptor	
USB A to USB OTG adaptor	
Inline ICP® charge converter (422Exx Series)	

[1] ±8 V pk guaranteed
[2] 16-bit selectable by software
[3] Proportional to sample rate
[4] Sample rate dependent (48 kHz to 8 kHz)



Outline Drawing
Dimensions in inches [mm]

THE MODAL SHOP
MTS SYSTEMS CORPORATION

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