

Model Number  
**485B39**

# DIGITAL ICP® - USB SIGNAL CONDITIONER

Revision: C  
ECN #:

## PERFORMANCE

	ENGLISH	SI
Channel Count	2	2
Voltage Range (nominal)	± 10 V pk <sup>1</sup>	± 10 V pk <sup>1</sup>
ADC Resolution	24-bit <sup>2</sup>	24-bit <sup>2</sup>
Frequency Range (± 5 %)	0.8 Hz to 20.7 kHz	0.8 Hz to 20.7 kHz
Sample Rate	48, 44.1, 32, 22.05, 16, 11.025, 8 kHz	48, 44.1, 32, 22.05, 16, 11.025, 8 kHz
Antialiasing Lowpass Filter (-3dB) at 48 kHz	22.9 kHz <sup>3</sup>	22.9 kHz <sup>3</sup>
AC High Pass Filter (-3dB)	1 Hz to 0.5 Hz <sup>4</sup>	1 Hz to 0.5 Hz <sup>4</sup>
Digital Output Interface	USB class 1 audio	USB class 1 audio

## ENVIRONMENTAL

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

## ELECTRICAL

Excitation Voltage (to sensor: ± 5 %)	24 V DC	24 V DC
Constant Current Excitation (± 5 %)	4 mA	4 mA
DC Power (USB)	< 500 mW (5 V at 100 mA)	< 500 mW (5 V at 100 mA)
Settling Time	1.5 seconds	1.5 seconds
Electrical Isolation (case)	Grounded	Grounded

## MECHANICAL

Housing Material	Stainless steel	Stainless steel
Size (length x width x height)	2.4 in x 1.5 in x 0.7 in	60 mm x 39 mm x 19 mm
Weight	4.4 oz	125 gram
Sensor Inputs	2 BNC jacks	2 BNC jacks
Digital Output	11 in integral USB cable	28 cm integral USB cable
USB Connector	Type A	Type A

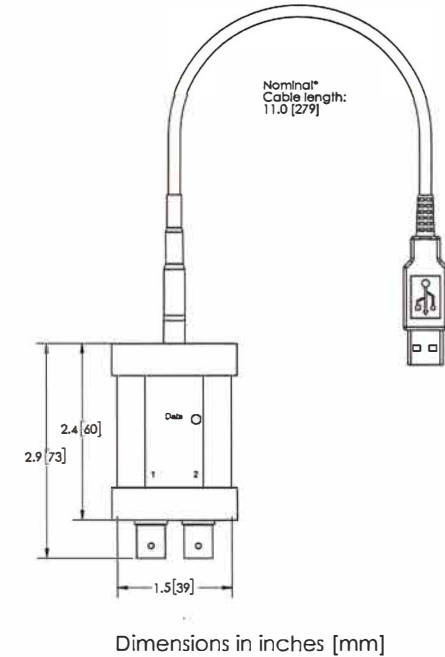
### NOTES:

- <sup>1</sup> ± 8 V pk, guaranteed
- <sup>2</sup> 16-bit selectable by software
- <sup>3</sup> Proportional to sample rate
- <sup>4</sup> Sample rate dependent (48 kHz to 8 kHz)

### OPTIONAL ACCESSORIES:

- MD821AM/A USB A to Lightning camera adaptor
- USB A to USB OTG adaptor

## PRODUCT DRAWING



## OPTIONAL VERSIONS

- V485B39 – Voltage inputs (no ICP supply current)
- IV485B39 – ICP (CH 1), voltage (CH 2)

In the interest of constant product improvement, specifications may change without notice.



All specifications are at room temperature unless otherwise specified.

Project Engineer: <i>NMA</i>	Product Manager: <i>NAP</i>	Mkt Team Leader: <i>CAO</i>	Spec Number: <b>PS-0149</b>
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