TA487 IEPE Signal Conditioner

USB-powered interface for IEPE sensors

A simple and compact way to interface integrated electronics piezoelectric sensors to data acquisition systems

Easy connectivity for industry-standard IEPE strain gauges, pressure sensors, accelerometers and microphones

A 4 mA constant current source powers the sensor from USB

View signals from standard IEPE sensors on a PicoScope®, or other instruments with a BNC input connector

Allows PicoScope® to be deployed on other measurement applications while reading IEPE measurements

TA487 Technical Specifications	
Bandwidth (–3 dB)	0.1 Hz to 30 kHz
Input connection (from transducer)	BNC female
Output connection (to measuring instrument)	BNC male
Signal gain	1:1
Accuracy	±1% (additional to transducer and measuring instrument accuracy)
Noise	< 60 µV RMS
Supply voltage to transducer	28 V ±3%
Supply current to transducer	4 mA ±5%
Discharge time constant	1.85 s
Required measuring instrument impedance	1 MΩ (Greater than 1 MΩ can be used, but will affect discharge time constant and low-frequency response)
Power connection	USB mini B
Power requirements	USB (5 V DC, < 100 mA)
Dimensions	76 mm x 30 mm x 15 mm
Weight	30 g
Operating temperature range	0 to 40°C
Storage temperature range	–20 to 60°C
Operating humidity range	5 to 80% RH non-condensing
Storage humidity range	5 to 95% RH non-condensing
Safety compliance	Designed to EN 61010-1:2010+A1:2019
EMC compliance	Tested to EN 61326-1:2013 and FCC Part 15 Subpart B
Environmental compliance	RoHS, WEEE and REACH compliant

Ordering information

Order code	Item	Description
TA487	IEPE Signal Conditioner	USB-powered IEPE signal conditioner, includes a USB mini cable

Optional accessories

Order code	Item	Description
TA095	Single-Axis IEPE Accelerometer	Accelerometer suitable for use with the TA487 or other standard IEPE input devices

More products from Pico Technology...

PicoScope 4000 Series
High precision
12 to 16 bits

TA095 Single-Axis IEPE Accelerometer
±490 m/s² measurement range
0.5 Hz to 10 kHz frequency range

UK global headquarters:

Pico Technology
James House
Colmworth Business Park
St. Neots
Cambridgeshire
PE19 8YP
United Kingdom

☎ +44 (0) 1480 396 395
✉ sales@picotech.com

North America regional office:

Pico Technology
320 N Glenwood Blvd
Tyler
TX 75702
United States

☎ +1 800 591 2796
✉ sales@picotech.com

Asia-Pacific regional office:

Pico Technology
Room 2252, 22/F, Centro
568 Hengfeng Road
Zhabei District
Shanghai 200070
PR China

☎ +86 21 2226-5152
✉ pico.asia-pacific@picotech.com

www.picotech.com

Pico Technology @LifeAtPico @picotechnologyltd Pico Technology @picotech