

AMTI introduces the next generation in strain gage amplifiers...

Gen 5: Advanced six-channel signal conditioner

The Gen 5 provides industry-leading performance and innovative features in an easy-to-use and cost effective package.

State-of-the-art signal conditioning

Signal conditioning includes: 1 kHz anti-aliasing filters, oversampling and digital signal processing

Fully calibrated and NIST-traceable

Tested to medical-grade standards for safety, essential performance and electro-magnetic compatibility

Heart of new Smart Platform System

Provides plug and play interface for AMTI force plates and force sensors

Applies complete transducer profile stored onboard all new AMTI force plates and force sensors

Allows users to order their platforms by simply walking across them in subjects' direction of travel

Intuitive and easy to use

Fully software configurable

All calibration and configuration settings stored internally

Automatic balancing of strain gage bridges initiated by front-panel button or by software

Multiple Gen 5's automatically synchronize data sampling

Flexible integration

Includes NetForce, AMTI's complete data acquisition solution

Easily integrates with analogue systems and third-party software

Software development kit available for incorporating Gen 5 amplifiers into proprietary systems



Gen 5 specifications

Analogue inputs	Six four-arm strain gage bridge inputs (350 Ohm minimum)
Bridge excitation	Channel independent, software configurable – 2.5, 5 or 10 VDC
Amplifier gains	Channel independent, software configurable – 500, 1000, 2000, 4000
Auto zero (with offset capability)	Push button or software initiated
Anti-aliasing filter	1000 Hz low pass, 2-pole Butterworth
Analogue output range	+/- 5 volts
Analogue output reconstruction filter	1000 Hz low pass, 3-pole Butterworth
Analogue output DAC	16 bit
Sample rate	Max: 2000 Hz/channel Min: 10 Hz/ channel
Synchronization	Genlock, external trigger, internal clock
Digital Signal Processor	16 bit
Digital data	IEEE 754 floating point, 32 bit
Digital resolution	14 ENOB
Power supply	External medical grade (included) Input: 120-240 VAC, 50/60 Hz Output: 15VDC @ 0.3 amps
Connectors	Digital output: USB 2.0 Sync/genlock: RCA phono Power: 5.5 mm x 2.1 mm plug Analogue output: DB25S Transducer Input: 26-pin circular type connector
System environmental operating conditions	0 to 125°F (-18 to 52°C) 0 to 70% RH, indoor/laboratory environment
Physical dimensions (WxLxH)	26 x 21 x 4 cm (10.25 x 8.25 x 1.72)
Weight	2 kg (4.5 lbs)



The Gen 5 is a medical-grade strain gage signal conditioner manufactured under the ISO 13485:2003 and ISO 9001:2008 quality systems.



This product meets the standards set by CE Directive 2006/95/EC and has successfully been tested to comply with medical electrical equipment standards regarding basic safety, essential performance and electro-magnetic compatibility: AAMI – ES 60601-1, CSA – EN 60601-1, UL-IEC – EN 60601-1, IEC – 60601-1-2.