

ACCUGAIT SPECIFICATIONS

The AccuGait is AMTI's portable gait solution and is designed to pair with the optional [AccuGait Walkway](#). The force plate uses Hall Effect sensors to accurately measure ground reaction forces while allowing for internal amplification and high overload protection on all axes. The AccuGait interfaces directly with a computer via a convenient USB or RS-232 connection.



Units: Capacity:

Dimensions (WxLxH)	19.75 x 19.75 x 1.76 in	Mounting hardware	Not Required
Weight	25 lb.	Sensing elements	Hall Effect
Channels	Fx, Fy, Fz, Mx, My, Mz	Amplifier	Built-in
Top plate material	Composite	Analog outputs	Optional
Temperature range	0 to 125°F	Digital outputs	6 Channels

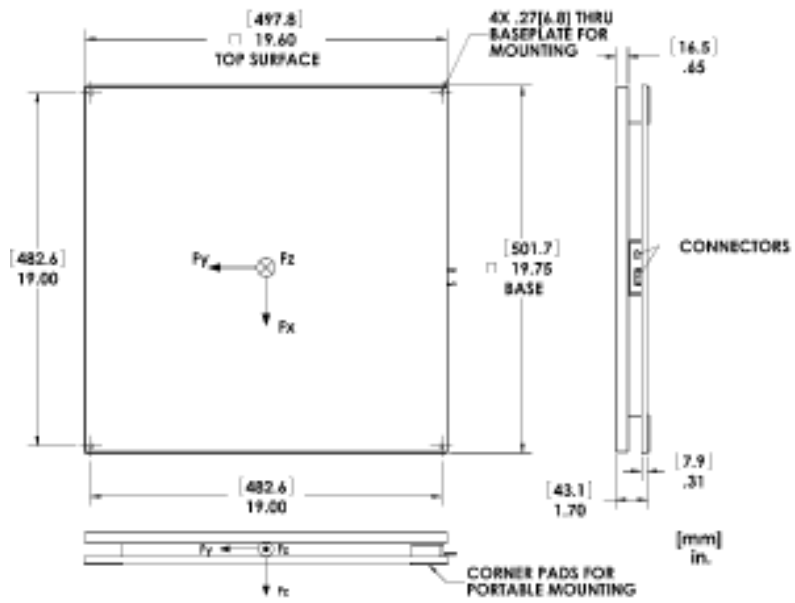
Channel	Fx	Fy	Fz	Units	Mx	My	Mz	Units
Capacity	100	100	300	lb	-	-	750	in-lb
Sensitivity	-	-	-	µv/v-lb	-	-	-	µv/v-in-lb
Natural frequency	140	140	150	Hz	-	-	-	Hz

Published specifications subject to change without notice.

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TECHNICAL DRAWINGS

Footprint Drawing



Electrical Drawing

No electrical schematic currently in the database

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Force plates are sensitive test instruments. Building and ground vibrations can result in unwanted signal noise; therefore, we strongly suggest that all strain gage platforms are mounted in a manner that minimizes vibration of the entire device.

Mounting is best accomplished by securing a force plate to a flat surface that is bonded to a solid structural foundation, such as a ground-level concrete slab or heavy concrete construction. AMTI's standard mounting system uses precision-machined aluminum rails adhesively bonded to a concrete floor. AMTI also provides moveable mounting systems, mounting arrays, magnetically clamped air bearing mounts, and other specialized mounting options.

If ground-level installation is impossible, it is best to locate force plates over support beams, near support columns, or near supporting walls in order to minimize vibration as much as possible. Locations near equipment which can cause vibrations, such as heating and ventilating systems, should be avoided. In the event that a force plate must be installed at a vibration-prone location, we recommend the use of high frequency platforms, such as the OR6-6 and the BP400600HF.

At AMTI, we understand that every laboratory has a unique set of requirements and challenges. For more than 30 years, we have been working directly with our clients to help create force plate installations that are specifically suited to their needs. Please do not hesitate to contact us if we can be of any assistance.

Freestanding installation



A platform may be left freestanding for certain activities, such as balance, that have relatively low-frequency dynamic content, low impulse loading, and low side loads. Freestanding installation may provide satisfactory results in these instances but is typically not recommended by AMTI unless using a portable force plate specifically designed for these applications. AMTI does not recommend using unmounted or unsecured force plates for dynamic activities that could result in movement of the platform, potentially injuring a subject.

Installation considerations:

If using this method, care must be used to ensure the platform is on a flat surface. If the platform rocks or shakes when a load is applied, noise artifacts may be introduced into the data. Low pile carpeted floors generally work reasonably well under freestanding platforms as they distribute the applied load evenly. On hard floors, it is best to shim the platform until no rocking is evident with paper or metal shims.

Raised installation

This is the simplest method of mounted installation and is often used when a pit installation is not possible, such as on a second-floor laboratory. The force plate is mounted on top of the existing floor and raised floor is built up around the platform. In labs with more than one force plate, a raised access flooring system combined with an array of alternative mounting rails can provide the ability to configure the force plates into multiple layouts.

Installation considerations:

Researchers and clinicians conducting balance studies may elect to just provide a short ramp for patients to safely and easily get on and off the force plate. Some may even choose to simply leave the top surface of the platform sitting several inches

Installation options

[Freestanding](#)

[Raised](#)

[Recessed pit](#)

[Magnetic mounting](#)

above the floor. This arrangement may be satisfactory for balance activities since the entire range of motion occurs within a platform's top surface.

Gait and athletic performance studies require lead-in and walk-out areas that are level with the top surface of the force plate. Many gait labs have achieved this using computer room raised access flooring or self-made solutions.

Recessed pit installation

Pit installation is the typical method of mounting a force platform, placing the working surface of the force plate level with the floor of the lab. This method does not inherently provide the same degree of flexibility offered by some of the other mounting methods; however, our engineers have helped design many client-specific mounting layouts that allow users to arrange their force plates into multiple configurations based on the research being conducted.

Installation considerations:

Pit mounting begins by creating a recessed pit in the concrete of the ground floor. This is easiest and most often accomplished in new construction. In existing buildings, this method requires the removal of concrete and the preparation of the area prior to installation of force plates. This typically necessitates the involvement of an organization's facilities department and may require the assistance of an architect and contractor. As pit construction is an involved undertaking, it is recommended that the potential for future expansion is taken into account. In general, creating a larger pit, such as one large enough for four plates when only two are being installed, can be done with minimal additional effort and expense. Please [contact AMTI](#) if you require assistance with any portion of this process.

Magnetic mounting installation



The greatest platform placement flexibility can be achieved with AMTI's innovative magnetic mounting system, which allows for specially equipped platforms to be easily mounted and repositioned anywhere on a mounting surface up to several square meters in area.

The system consists of a magnetic stainless steel sheet bonded to a poured epoxy surface. Compatible platforms are equipped with magnetic hold-downs and air bearing casters, which activate with a simple air pump and allow the platform to be rolled into any position on the mounting stage.

Installation considerations:

Magnetic mounting systems must be manufactured in place and require considerable expertise. AMTI's sales team can help you determine the cost to install such a system at your site, as well as answer any additional questions you may have.

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