

NRS™ NeuroCom Research System



Physical Dimensions

(W x D x H)	in	cm
Assembled dimensions	53 x 61* x 94	135 x 155* x 239
Base	53 x 61 x 6	135 x 155 x 15
System cart	25 x 24 x 44-57**	64 x 61 x 112-145**
Dual force plate	18 x 18	46 x 46
Step height	6	15
Maximum patient height	80	203
Maximum patient weight	440 lb	200 kg
Minimum footprint required	96 x 75	244 x 191
Minimum ceiling height	95	242
Total system weight	650 lb	295 kg

*Depth extends to 64 in / 163 cm with surround in resting position.
**Minimum-maximum monitor extension height.

Components

- Moveable (rotate and translate) NeuroCom platform with integrated AMTI Dual Top force plate providing 6 degrees of freedom under each foot
- Turn-key, user-programmable software
- Overhead support bar with patient harness set
- Computer with Windows operating system
- 17" LCD display
- System Cart
- Color printer and wireless mouse

Electrical Characteristics

- 100-240 VAC / 50-60 Hz / 1200 Watt
- ETL listed to UL60601-1
- ETL listed to CAN/CSA No. 601.1
- Compliant to CE standards



Specifications subject to change without notice.

For product, pricing, and sales information, please contact AMTI at sales@amtmail.com or +1 (617) 926 6700.

For additional information regarding the Neurocom dynamic platform system, please visit www.resourcesonbalance.com.



NRS™

NeuroCom Research System

The NRS menu-driven operating system provides you with the ability to design research protocols featuring dynamic sensory and motor conditions that emulate the real world challenges to balance, mobility, and gait control. The AMTI Dual Top force plate provides detailed access to the force data (X, Y, and Z components) required to accurately demonstrate the impact of those challenges on human performance.

Research Software Package

User-programmable operating system for flexibility in designing research protocols. User can specify:

- Independent control of force plate movement profiles
 - Waveform: mathematical function, look-up tables
 - Ramp movement
 - Sway referencing
 - Movement onset delay
- Trial duration
- Cursor display
- Input/output sync pulses
- Trigger control (manual, weight threshold, external sync)

Data from the NeuroCom motor positions and AMTI force plate can be exported to a delimited text file for easy access by statistical packages.

Performance Characteristics

Servomotors provide smooth, accurate movements of the AMTI Dual Top force plate. Users can define the control parameters for the servomotors, which can be activated individually or in pairs.

Translation:

- $\pm 2.5''$ (6.35 cm) from center, for a maximum of 5'' (12.7 cm) in the forward-backward direction
- Maximum velocity: 15 cm/s

Rotation:

- $\pm 10^\circ$ from center, either toes-up or toes-down, for a maximum of 20°
- Maximum velocity: $50^\circ/\text{s}$

AMTI Dual Top Force Plate (Per Side):

- Fz Capacity, lb (N): 400 (1800)
- Fx, Fy Capacity, lb (N): 40 (180)
- Mz Capacity, in-lb (Nm): 300 (34)
- Mx Capacity, in-lb (Nm): 1200 (135)
- My Capacity, in-lb (Nm): 600 (68)
- Sampling rate: 100 Hz

Force plate movements and data acquisition can be initiated either under operator control or by an external sync pulse. A sync-out pulse is also available to synchronize external devices.