

Stridalyzer *FORCE PLATE*

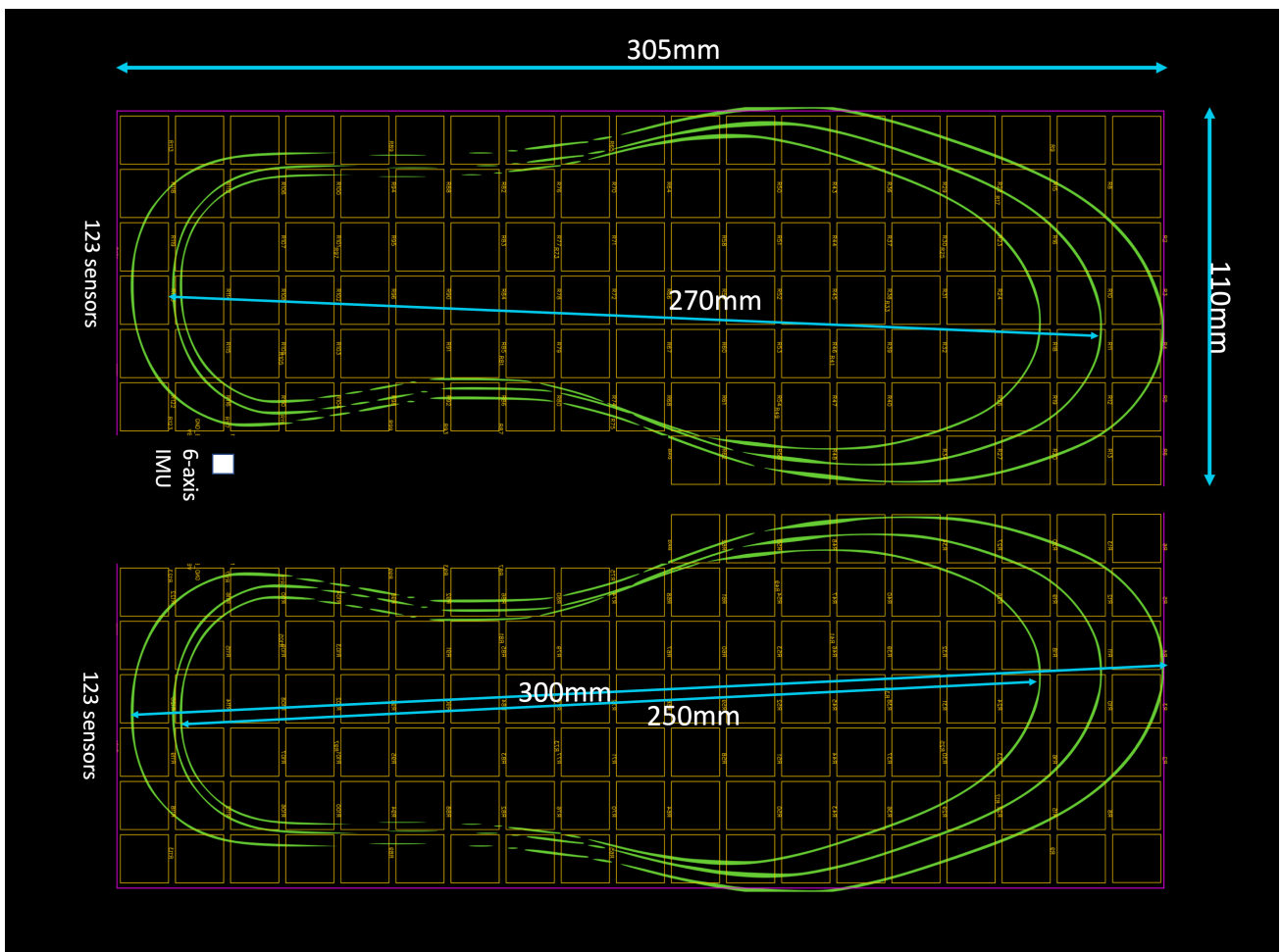
Technical Specifications

Solution Components

1. Sensor-embedded pressure/force
2. App for data collection, visualization and rehabilitation (runs on iPad or ANY platform with Google Chrome)
3. Cloud-based backend for data storage
4. Web-based portal for clinicians/doctors to review and analyze long-term trends as well as remotely assign treatment plans

Structure & Sensor Placement

- 123 x 2 piezoresistive force sensors in rectangular pattern. Size of each sensor is 12.5mm x 12.5mm. Spacing between two sensors is 3.5mm in each direction - creating an effective coverage area of 16mm x 16mm per sensor. The effective cumulative sensing area is 305mm X 110mm per foot.
- One 6-axis IMU units placed on the LEFT plate



Insole & Sensor Properties

Sensors	<ul style="list-style-type: none"> • Piezoresistive force sensors (123 X 2) • 6-axis inertial motion sensor (accelerometer + gyro combo)
Gait parameters recorded	<ul style="list-style-type: none"> • Instantaneous force on every 16mm x 16mm area • Ground contact time • Strike type • Weight distribution (body balance) • Impact forces • Push-off forces • Loading rate (dF/dt)
Sensing frequency	20 Hz (default), configurable from 1 Hz to 50 Hz
Circuit battery life	Up to 10 hours of continuous usage
Charging mechanism	Micro USB
Water resistance	IP5 (low-volume water/sweat exposure resistant)
Compliance standards	FCC, CE, RoHS, TELEC, Canada IC
Total weight	~500gm
Compatible foot sizes	Up to 300mm
Material	High-density PU film, EVA foam, acrylic plate support
Cleaning method	Clean the surface with disinfectant wipes
Warranty	2 years

App & Cloud Software

Platforms	Any platform with Google Chrome browser
Communication method	Sensor insoles to app: Bluetooth LE 5.0 with backward compatibility to Bluetooth LE 4 App to cloud: Secure internet
Key features	<ul style="list-style-type: none"> ➤ Send report to patients with single click ➤ Assign & monitor rehab/training plans ➤ Review short-term & long-term progress ➤ Set baseline & compare against baseline ➤ Record & recall specific pressure point instances