Mitch™
Research Sensor Platform

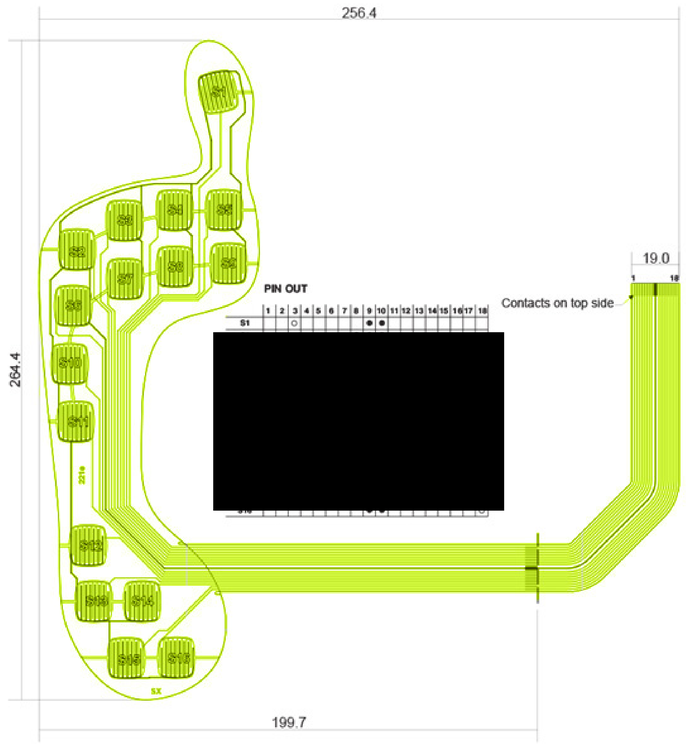
Product Code: A3b4v02
Addon Code: C3b1v02

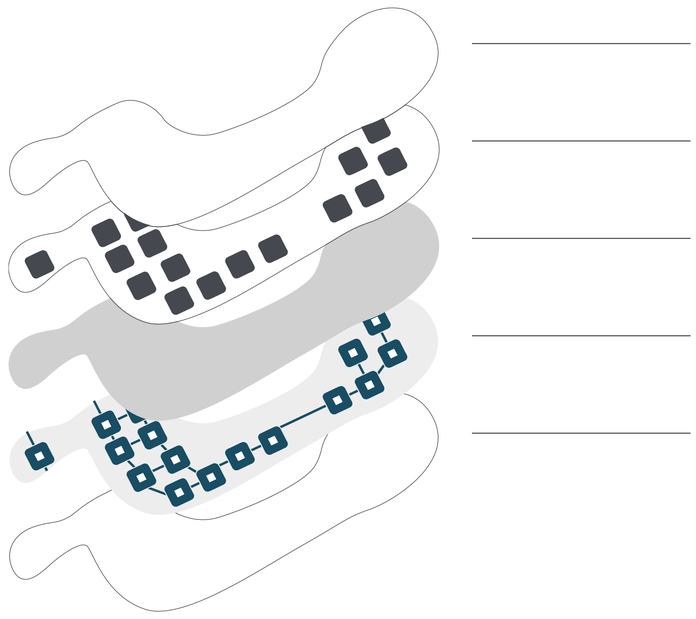
∞ Add-on / YETI

Sensor Description

YETI is a membrane sensor for Gait Analysis designed to be a plug and play with MITCH system. It can be used for foot pressure points measurement by healthcare professionals, trainers, biomedical engineers, scientists and researchers. YETI detects and measures contact, touch, force and rate of change of an applied load. This in-shoe sensor behaves like a Force Sensing Resistor(FSR), exhibiting a resistance value inversely proportional to the amount of force applied. As the applied pressure increases, the equivalent resistance of the sensor decreases. YETI sensors are manufactured as a sandwich construction of a polyester sheet and conductive ink, for a total thickness of 240 µm. Yeti features 16 measurement points carefully placed to maximize the amount of information usefull for gait and pressure mapping research. The sensor can flex and the interconnection flat cable is optimized to follow the engonomics of the foot.

FSR Technology





Top polyester layer (thickness: 50 µm)

FSR layer (carbon ink)

Space layer (thickness: 90 µm)

Circuit layer

Bottom polyester layer (thickness: 50 µm)

Available Sizes: From 36-37 to 46-47

Technical Specification

Force-sensing resistors (FSR) pressure membrane	
Operating Temperature	-20 °C - +50 °C
Substrate	Polyester
Overall membrane thickness	240 µm
Pads' dimensions	H 16.67 mm - W 15 mm
Overall sensing area	40 cm²
TYPICAL PERFORMANCE	
Linearity (typical)	±10 %
Repeatibility (typical)	±3 %