

# F-Socket™

## In-socket Prosthetics Analysis



### DESIGN, FIT & FUNCTION OF PROSTHETICS

- Ultra-thin, high-resolution sensor placed within the socket can be trimmed into freely floating fingers to closely approximate the curvature of the socket interface.
- Detailed pressure profiles and graphical displays for quantitative analysis.
- Amputee can walk while pressure and force distribution data is captured.
- Closely examine the formation of pressures within the socket interface during the various phases of gait and modify the socket/stump interface accordingly.

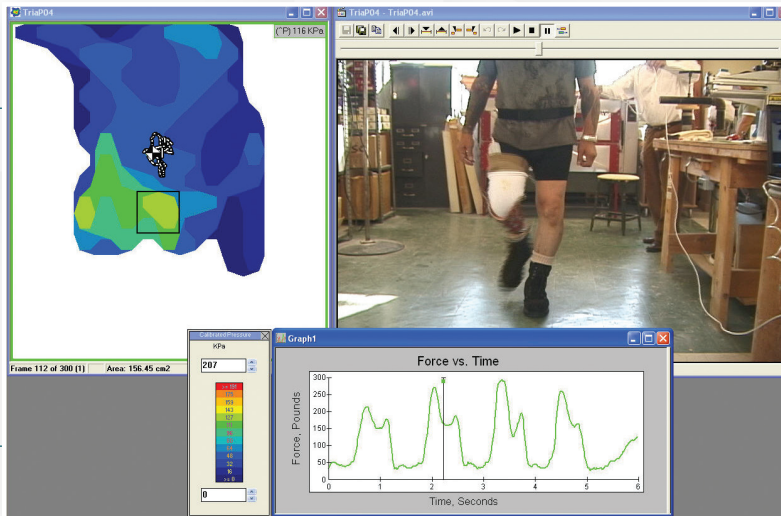
### BENEFITS

- Determine the proper fit of below the knee (BK) and above the knee (AK) sockets and prostheses
- Determine contact area and dynamic stress analysis of the socket design
- Assess the design and evaluate function of the socket
- Examine the distribution of pressure during the various phases of gait
- Improve the design and fit of sockets and prosthetics
- Increase longevity for the wear of the socket and use of prosthesis
- Reduce recovery time for improved healing
- Tangible, visible biofeedback, thereby increasing compliance and tolerance of the amputee to the socket and prostheses

# F-SOCKET ANALYSIS SOFTWARE

Pressure profiles available in 2D or 3D  
Peak pressures identified by various colors to locate high-risk areas

Adjustable Legend  
Legend can be adjusted to display different units and levels of pressure saturation



Optional Video Synchronization Software

Video playback synchronizes with pressure distribution during different phases of gait

Force vs. Time Graph  
Several graphing options allow for analysis of changes in gait and symmetry due to prosthetic modifications

## SPECIFICATIONS

### System Specifications

Connection	Tethered
Scan Speed	up to 160 Hz
Maximum Distance	up to 100 m (328 ft)

### Standard F-Socket Sensor Specifications

Sensor Model #	9811E	9833E
Technology	Resistive	Resistive
Active Sensing Area	20.32 x 7.62 cm (8.00 x 3.00 in)	20.32 x 19.05 cm (8.00 x 7.50 in)
# of Senses/sensor	96	240
Pressure Range	25 psi/175 kPa 75 psi/517 kPa	50 psi/345 kPa
Thinness	0.15 mm (0.007 in)	0.15 mm (0.007 in)

*I found the F-Socket ... to be an excellent tool for objective evaluation of new prosthetic components. It became a valuable part of the experimental routine for me and colleagues.*

Mark Pitkin, Ph.D.  
Director, Gait Laboratory  
New England Sinai Hospital & Rehab Center

**CONTACT US | FREE DEMONSTRATION**

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