



# F-SCAN<sup>®</sup> VERSATEK SYSTEM

## bipedal in-shoe analysis

*F-Scan*<sup>®</sup> is a measurement system that captures dynamic in-shoe pressure information revealing interaction between foot and footwear. Unlike traditional visual observation of foot function and gait, *F-Scan* quantifies contact pressure distribution and timing. It includes sensors, electronics, and software as well as a protocol for analysis, diagnosis, and confirmation of the effectiveness of interventions. The extremely thin, high resolution *F-Scan* sensor ensures the most accurate data is captured. Other proponents of the system include:

- USB Connection to laptops makes the system easy-to-use and portable.
- Faster scan rates enable better capture of dynamic events & plantar pressure assessment.
- *VersaTek*<sup>®</sup> cuffs feature light weight hardware, indicator lights, and standard CAT5E cables.
- New Edge connection provides more reliable connection to sensor.

For clinicians dissatisfied with the limitations of traditional examinations, *F-Scan* confirms the efficacy of treatment. For researchers investigating or studying foot function, gait, and footwear design/function, *F-Scan* provides biomechanical parameters and understanding of how the foot and gait are functioning.

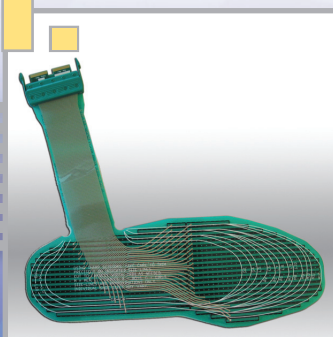
## APPLICATIONS:

- Screen for disorders secondary to diabetes or other neuropathic issues
- Observe gait abnormalities
- Regulate weight bearing after surgery
- Monitor degenerative foot disorders
- Assess high pressures due to ray hypomobility
- Immediate determination of orthotic efficiency
- Pre- and post-surgical evaluations
- Identify areas of potential ulceration
- Segment various regions of the foot

## BENEFITS:

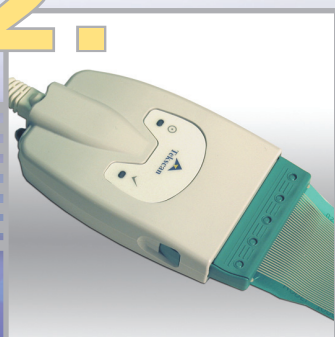
- Manage treatment of foot inside the shoe
- Increase orthotic footwear performance
- Reduce cost by reducing the need for follow-up and orthotic adjustments
- More referrals by increasing patient satisfaction
- Supporting documentation for fee-for-service approach or insurance claims

### 1. Trim



Ultra thin, high resolution sensor - 960 sensels

### 2. Connect



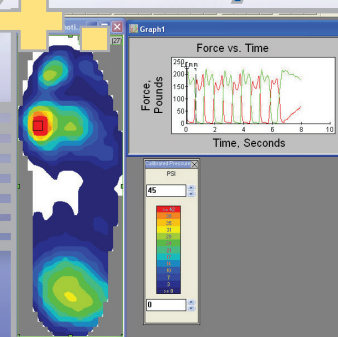
Edge Connect sensor; USB Connection to PC

### 3. Collect



850 Hz Scan Rate

### 4. Analyze

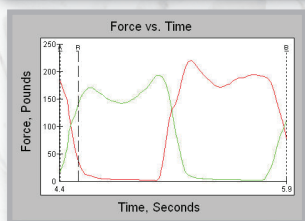
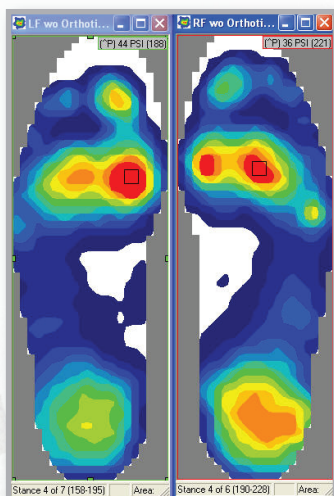


Analyze pressure data for high risk areas



# F-SCAN® ANALYSIS

## PRE-ORTHOTIC



## POST-ORTHOTIC

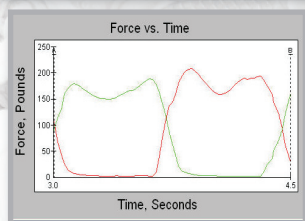
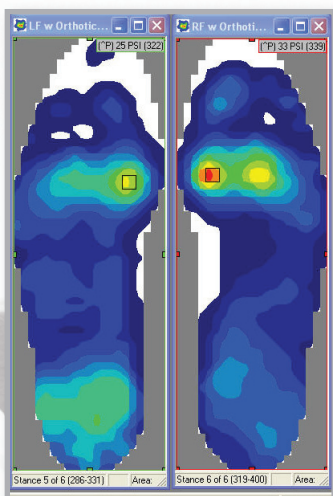


Image above (left) shows patient before treatment with high pressure areas (as indicated in red). Post-treatment evaluation (right) confirms orthotic efficiency and reduction of high pressure areas, resulting in improvement of foot function and gait.

*“The F-Scan system has completely changed my understanding of the foot’s function...I am able to make step-by-step changes and modifications to my patients’ orthotics, and know immediately whether it has bettered or worsened their condition.”*

— Bruce Williams, DPM  
Merrillville, IN

Contact us today for a demonstration!

www.tekscan.com / 800.248.3669

## RELATED PRODUCTS & OPTIONS

### Research Software

```
25 START_FRAME 1
26 END_FRAME 500
27 UNITS PSI
28 ASCII_DATA @@
29 Frames(X), Time (X), I
30 1, 0, 28, 5, 71, 49, 4, 3
31 2, 0, 02, 28, 5, 72, 50, .
32 3, 0, 04, 29, 6, 74, 52, 4, 40
33 4, 0, 06, 29, 6, 75, 54, 3, 40
34 5, 0, 08, 30, 6, 77, 56, 3, 41
```

additional graphing capability, tools to isolate & segment anatomical regions of the foot, & ASCII output

### TAM™ (Timing Analysis Module)

Site	Range
Hallux	70-85
Mhead1	70-85
Mhead2	70-85
Mhead3-4	72-87
Mhead5	75-90
Midfoot	
Condyle	50-62

timing data, relative to segmented foot function & phases of the gait cycle, relative to normal function

### CoM'analysis® (Center of Mass Analysis)

Priority Index	Remove Out Index	Close
Before	470	
After	745	
Energy Efficiency Index	Remove Out Index	Close
Before	10,267	
After	17,962	

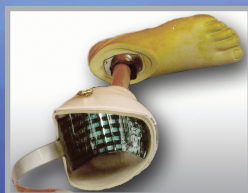
gait efficiency based on motion of the body's center of mass, including symmetry between left & right sides, purity, & energy efficacy of gait

### Video Synchronization™



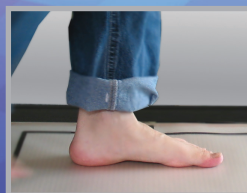
synchronize & play back both video & pressure data simultaneously to study gait patterns

### F-Socket™



assessment of prosthetic pressures

### Floormat



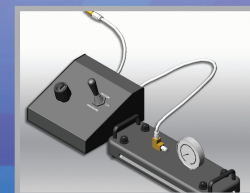
add floor mat(s) for barefoot assessment

### Grip™



hand grip & ergonomic studies

### Equilibrators



improve uniformity of sensor response