## Tactilus<sup>®</sup>

## **Full Body Sensor**



Subject wearing entire body sensor

The Tactilus<sup>®</sup> Human Body Interface sensor system is designed to allow the user to collect pressure magnitude and distribution data from across the surface of the human body.

**Application: Human Interface** 

Physical human interface is every bit as important as the ubitiquous graphical user interfaces on our computers, but the world hasn't invested in analysis and research in these areas commensurate with the opportunity at stake. Tactilus<sup>®</sup> allows the flexibility of recording human interface pressure across multiple skin regions simultaneously. Bringing human factors and ergonomic engineering to a new level, Tactilus<sup>®</sup> aids the test or design engineer in optimizing the tradeoff often made between performance and comfort.

**Tactilus® Technology:** Tactilus® is a matrix based tactile surface sensor. Essentially an "electronic skin" that records and interprets pressure distribution and magnitude between any two contacting or mating surfaces and assimilates that data collected into a powerful, yet user-friendly, Windows® based tool kit. The architectural philosophy of Tactilus® is modular allowing for portability, easy expansion, and simultaneous data collection of up to 6 discrete sensor pads. Tactilus® employs sophisticated mathematical algorithms that intelligently separate signal from noise, and advanced electronic shielding techniques to maximize environmental immunity to noise, temperature and humidity. Our proprietary sensor design ensures the most robust sensor in the industry - an investment that will sustain thousands of uses.

SPECIFICATIONS					
Technology	Piezoresistive				
Surface Pressure Range	0 - 6 PSI (0 - 0.42 kg/cm2)				
Array Size	Multiple lined sensor elements				
Active Sensing Points	Up to 2,600 - 2,800				
Total Sensing Area	Customizable to application;				
- Front	- 600mm x 600mm				
- Back	- 600mm x 600mm				
- Right and Left Arms	- 300mm x 400mm				
- Shoulder	- 550mm x 500mm				
- Head Opening	- 250mm x 320mm				
Scan Speed	Up to 15 hertz				
Spatial Resolution	Custom from 0.37 in (9.5 mm)				
Thickness	2.5 mm				
Accuracy	± 10%				
Repeatability	± 2%				
Hysteresis	± 5%				
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	D: 1 ( 0)				Driver Info		
A	Right Shoulde	er			Driver Info		
					Driver Version	2.0.2	
					Sensor Size	5.0 mch x 30.0	
					Grid	28 x 5	
					Sensing Points	140	
					Statistics		
	+++++  ++				Total Area	150.0 inch?	
	📖 Head 📖			ЩЩ	Contact Area	28.9 inch7	
Front			Lower Ba	ICK 🛛 🚺	Average Pressure	44.1 PSI	
	Hole 🔳				Maximum Pressure	100.0.PSI	
		A CONTRACTOR OF			Center of Mass	1.3 inch x 15	
					Statistics for Region	n 1	
					Total Area		
					Contact Area		
					Average Pressure	-	
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Left Shoulder				Force			
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Screenshot of Tactilus <sup>®</sup> software reveals pressure levels							
Screenshot of factilius software reveals pressure levels							

<sup>6</sup> This product should give us great data and validation of our design direction in the future. Our company President saw the sensors and was very impressed <sup>7</sup>/<sub>7</sub> - EDGE PRODUCT DEVELOPMENT, Danny Massam



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