

## VMG 13™

## Category:

## Data Gloves

The entry level, wireless, Bluetooth, 13 sensor VMG 13<sup>™</sup> data glove meets the needs of the virtual reality and animation industry.

The VMG 13<sup>™</sup> data glove system provides 5 high accuracy joint angle measures and 5 pressure sensors. It uses bend sensor technology to accurately transform finger and hand motion into real time data with no magnetic interference.

The VMG 13<sup>™</sup> can be used in a wide variety of applications including virtual reality, motion capture, animation, robotics and medical.

**Sensors:** Very thin bend sensors: less than 0.35mm thickness.

12 bit ADC sampling for accurate bend detection.

1 Sensor per finger.

5 Pressure sensors, very thin: less than 0.35 thickness.

Complete 9-DOF orientation sensors (roll, pitch and yaw) for hand orientation and wrist orientation; the sensors mount a 3 axis gyroscope, a 3 axis accelerometer and a 3 axis magnetometer.

**CPU:** 32 MHz CPU board, very low power for battery operated data elaboration and transmission.

USB connector for wire communication and firmware upgrade.

On board Bluetooth module for wireless data communication.

High performance Lithium-Polymer Battery for long standing operation (up to 5 hours).

On board elaboration of hand and wrist orientation.

**Software:** Software management for data glove trimming and data sampling.

Complete SDK for custom software design.

Offers an object-oriented model with an accompanying C++ library. Unity driver included.

HTC Vive Tracker Puck with Unity code included.

Provides a general framework for constructing hand-enabled simulations from scratch or for integrating hand-interaction into existing applications.

Offers full network support. A user can run an application on a host computer while getting device data from another machine, permitting interaction with geographically distributed teams.

Supplies an open API for model import and interfacing with third-party visualization software. VRML/Cosmo (SGI Optimizer 1.2) implementation is included.

Provides significantly improved overall structure with better run-time integrity and more complete error handling.

Supports fast production with real-time data capture using 90 Hz calibrated kinematic output.

Supplies intuitive, easy-to-use controls through the glove calibration interface. Calibration takes less than one minute - fast and accurate.

Provides a familiar interface by displaying calibrated sensor data in the MotionBuilder interface, formatted in both hierarchy and constraint formats.

Included: The VMG 13<sup>™</sup> includes one data glove, batteries, USB cable, Software / SDK and Unity Plug-In.

VMG Data Glove