For more information visit www.PMDTec.com/bundle



### PMD[vision]<sup>®</sup> CamCube

meets Omek Beckon<sup>™</sup> SDK









...discovering new dimensions

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#### PMD[vision]<sup>®</sup> CamCube 3.0

PMD[vision]<sup>®</sup> CamCube 3.0 is the highest resolution all-solidstate TOF 3D camera worldwide. The optical sensor, with 200x200 pixels, enables the real-time capture of distance and grayscale information. Due to the outstanding sensitivity and the improved performance of the new PhotonICs®PMD 41k-S2, high accuracy even with lower integration times and longer distances is achievable and allow higher frame rates. Thanks to integrated SBI technology, this innovative product can be deployed in indoor and outdoor environments. The resistance to motion blur allows detecting fast moving objects. PMD[vision]<sup>®</sup> CamCube 3.0 is a leading-edge camera when it comes to all-solid-state 3D imaging applications. For advanced image processing, it even provides raw data and new algorithms to evaluate the data guality if desired.

#### [Key Features at a Glance]

- 200 x 200 pixels
- Suitable for indoor and outdoor environments - thanks to SBI
- Simultaneous capture of grayscale images and distance information
- Multiple operation modes: hardware trigger, software trigger and free run mode
- Resistance to motion blur
- Wide angle field of view using optimized PMD[vision]® optics
- Flexible CS-mount lens adapter for different fields of view
- Flexible measurement ranges using modular light sources
- Flexible readout with programmable Region-of-Interest (ROI)
- High-speed interface providing raw data for image processing
- Multi-camera operation using different frequency channels
- Firmware update ability
- Software package for data processing and visualization
- API for linux and windows (32bit/64bit) and MATLAB interface









# omek

### Omek Beckon<sup>™</sup> Development Suite

The Omek Beckon<sup>™</sup> Development Suite provides you with a rich and robust toolkit for incorporating natural and intuitive interfaces into your digital signage and other commercial applications.

Omek Beckon is optimized for the highest performance on both standard PC and embedded processors, giving you more power to run your device interface or applications. With Beckon, you can work in the languages, engines and frameworks that you are most familiar with.

The Beckon SDK comes with a set of pre-defined gestures which can be used to design most device and application interfaces. For those who want to create their own command gestures, the Beckon Gesture Authoring Toolkit is available as an add-on that can save months of development time.

#### [The Omek Difference]

#### Support for Multiple Development

Environments – Omek's development tools provide support for the most popular programming languages and game engines, including C++, C#, Mono, Flash, Unity, and more – enabling our customers to develop in the environments they are most comforta-

#### Support for Automated Gesture

Definition – Omek gives developers the only automated tool for turning body movements into gestures recognizable by their applications, without any coding - saving hundreds of hours of development time.

No Calibration Required – Beckon is able to find and calibrate the size of each individual being seen by the depth camera, without requiring them to stand in an awkward pose, which makes your devices and applications much more user-friendly and intuitive.

[full-featured set of middleware and tools]

## omek



Unlock the Full Power of Your PMD[vision]® CamCube 3.0 with Omek Beckon<sup>™</sup>!

As part of your PMD[vision] CamCube Bundle purchase, you are entitled to a complimentary copy of the Omek Beckon **Development Suite.** 

Using Omek Beckon with your PMD[vision] CamCube 3.0 gives you a complete solution for creating compelling interactive experiences that utilize advanced 3D body-tracking and gesture recognition capabilities.

The Beckon engine uses the scene data provided by the PMD[vision] CamCube 3.0 to identify humans in the scene and apply a skeletal framework to their forms. You can map the joints of your user's bodies to specific functions of your software, or use poses or specific movements - gestures - as ways to control your application.

#### [Target Platforms and Applications]

The PMD[vision]® CamCube Bundle is being used to power natural user interfaces across a wide variety of hardware and software products. Some of the key applications and target platforms for Beckon include:

- Interactive Digital Signage Augmented Reality
- Security and Surveillance Systems

Medical and Physical

**Therapy Systems** 

Human-Machine

**Robotics** Control

Classification

People Counting and

Body Pose Analysis

Interaction

- Motion Capturing
- Games and Consumer Electronics
- Information Kiosks
- Fitness Equipment
- Home Automation
- Training Simulation Systems
- Vending Machines
- Telepresence and Videoconferencina Systems

[complete solution for creating compelling interactive experiences











