

## PepTenCamera <PTC-FD13\*> ON SITE use

## **Design and Concept**

HiPep Laboratories established fundamental technologies for the PepTenChip<sup>®,</sup> peptide microarray, using a novel carbon substrate realizes the novel bio-detection principle of the fingerprint method (Pat. US, EU, JP). Its ripple effect is very large not only research and drug discovery/development but also involving high potential in clinical diagnoses in the future. When bio-chips are films, cameras are indispensable. Conventional detection system using sophisticated and large instruments and/or complicated reagent systems require expertized skill and thus cab be performed only big institutions/ hospitals. Sample collection of body fluids for analyses involves less technical difficulty, since bio-detection using PepTenChip<sup>®</sup> allows a "real-time on-site" manner, it is desirable that directly measurements of sampling specimen give time saving to improve efficiency also in the field. For this reason, we developed a portable and easyto-use detection device, "PepTenCamera" Model PTC-FD13 (PAT.P).



(1) DIN A4 size (ca 5 Liter) (2) Easily carried (ca 5 Kg) (3) Power supply allow to stand outside (4) Lap-top PC: USB connection (5) Field use (carry on baggage size)

Easy to use in a remote place/in a field, it can be used for home care. In the case that the samples have risks of infection, bio-safely level facility (BSL3, 4) are required. For the use such closed space, maintenance free and no sliding parts are equipped, thus fine adjustment and fixation of any parts are unnecessary. PTC-FD13 has been developed for upper stream patens owned by HiPep Laboratories. Additionally this device is also useful for micro-flow path observation (US & JP patents and EU PAT.P).

In biometric measurement PepTenChip® can create objective indicators for diagnoses, that are not dependent on the skill of medical doctors. In care of serious diseases and/or senior persons who can not fully communicate their problems orally to doctors.

## Additional filters: excitation wavelength for fluorescence (optional)

The wavelength of the excitation light source is optimized for TAMRA on capture molecules. Light sources and filters can be customized upon requests.

Wave length can be selected upon dyes and the filter can be easily replaced **TAMRA (Ex. 531 nm Em. 593 nm)** Filter for TAMRA = FF01-531/40-25 531  $\pm$  20 nm FF01-593/40-25 593  $\pm$  20 nm **FAM (Ex. 475 nm Em. 530 nm )** Filter for FAM = FF01-475/35-25 475  $\pm$  20 nm FF01-530/43-25 530  $\pm$  20 nm



Analysis software

## **Detection software (optional)**

The software is offered as an option, which is specialized in detecting and analyzing arrayed spots.

By applying the optimal template to the array image acquired by the PepTenCamera, the difference between the fluorescence intensity of each spot and the background can be automatically calculated and displayed. The image data (array data) acquired by the other equipment can be also analyzed. This software was constructed as outsourcing of HiPep Laboratory a license fee is required. Practically another software can also be applied.

HiPep are looking for manufactures under license



