

X-type strap with multi-lead sensing electrodes for ECG examinations整合多

導程心電圖訊號感測器的X型前背帶

許騰仁, 樊勁志, 宋志雲, 莊英慎, 林幸德

企業管理學系

管理學院

ysjuang@chu.edu.tw

### 摘要

This product combines ECG sensing electrodes, signal cable and X-type front strap, and therefore be able to overcome the shortcomings of traditional electrode patches, such as being difficult to be attached correctly, inconvenient for long-term use, and disorganized signal cables, etc. The idea of integration can offer users convenience and contains the concept of environmental protection because the patches are re-useable. This product can be applied to the management of personal health and meet the needs of long-term care.

We have worked on this product with Healthware Technology Co., Ltd., and applied patent for the special design.

The technical means of this product:

- (1) The clinch of X-type front strap is designed to be the position of the electrode.
- (2) We use clinch-buttons for ECG sensing electrode and the X-type front strap, so they can be easily attached and dis-attached. Users can chose traditional type of one-time-used patches or reusable conductive fabric material.
- (3) Since X-type front strap is integrated with signal cable, users do not need to settle wires and this arrangement can effectively reduce the noise interference.

關鍵字：ECG sensing electrode 、 X-type front strap