Non-contact clinical thermometer_AT-100M

(= thermometer for measuring the temperature of your face)



- It automatically measures the temperature of the face at a distance of <u>30-45 centimetres</u>.
- An image of a person on the surface of a screen (= mirror) is seen and any information about the person is <u>not stored</u> except his/her temperature in order to <u>respect his/her privacy</u>.
- A body temperature range of **34-42 ℃** is **measured** and an **announcement** (= temperature is high) is **made** when the temperature is <u>over</u> <u>37.5 ℃</u>.
- The thermometer **stands on the tables** or is **hold by** an officially used **stand**.
- The human body sends out energy in the form of <u>heat</u> as waves (= pattern in which some types of energy such as light and heat are spread or carried) that you cannot see (= infrared radiation). <u>Infra-red waves</u> are longer than those of red light in the spectrum (= band of coloured lights in order of their wavelengths, as seen in a rainbow and into which light may be separated).



- When the <u>temperature of your body rises</u>, the amount of <u>infra-red radiation</u> (= heat that is sent out in the form of waves) <u>increases</u> and you feel warm.
- <u>64</u> (= 8 multiplied by 8) <u>thermopiles</u> (= equipment consisting of thermocouples arranged for measuring small quantities of radiant heat) arranged in lines across and down (= <u>array</u>) are put into this non-contact infra-red (= 'below' red in Latin) thermometer, so that the presence of <u>heat produced by the 64 parts of your face is discovered</u>.

In consequence, <u>data that is collected by the 64 sensors</u> (= thermometers) is dealt with using a highly sophisticated (= very well designed and very advanced, and often works in a complicated way) system and <u>reasonably accurate temperature</u> is <u>shown</u> on the screen.

 The new invention was given a <u>patent</u> (= official right to make, use or sell an invention) by the Patent Offices in Korea, the USA, Europe and Japan.

Moreover, the non-contact infra-red thermometer was given '**Emergency Use Authorization**' from the Food and Drug Administration in the US as well as being <u>recognized as a medical device</u> by a government organization in Korea.