SMART INNOVATION IN HEALTHCARE
Corensis® Medical Kiosk

Offers an automation-based health platform that performs vital health measurements with the help of high precision medical sensors and advanced algorithms.
Features of Corensis® Medical Kiosk

**Efficient**
Shortens vital measurement duration and provides more efficient examinations.

**Ease of use**
With Corensis®, users can have an unattended vital measurement experience.

**Voice Assistant Support**
All steps are easily monitored via touch screen or voice enabled interface according to the users’ preference.

**Image Processing Technology**
ID verification processes are accelerated with the image processing technology.

**Reliable**
Corensis® Medical Kiosk is a solution that meets the medical measurement criteria.


- SpO₂
- °C
- BMI
- SYS/DIA
- ECG
- INFO
Body Temperature

Contactless body temperature measurement from 3-7 cm distance with an infrared sensor.
Oxygen Saturation

- Fast oxygen saturation measurement in dual-wavelength with the photodiode technology
- Real-time respiratory rate with photoplethysmogram special filters.

EKG

- Practical single-channel ECG measurement through the palm with grip electrodes
- Heart rate variability, arrhythmia and QT, QRS, PR intervals analysis
Blood Pressure

- Systolic, diastolic blood pressure measurement with the oscillometric method
- Comfortable and reliable measurement with the tunnel-type blood pressure cuff
Height Measurement

High-precision height measurement with image processing technology
Body Mass Index

- Medical-precision body weight measurement (<250)
- Body mass index calculation
- Basal metabolic rate calculation
- Optimal weight calculation
Digital Reporting and Analysis

All Data in a Single Page

After the measurement, the patient information and vital findings collected from the device are conveyed to the patient’s doctor as a one-page report.

Smart Algorithms and Analysis

The smart algorithms analyze the medical measurement results and offers decision support service to the healthcare staff. All the data collected from Corensis® can be analysed either in Corensis® Cloud system or locally on the kiosk itself as an on-prem solution according to the instutions’ preference.

- The ECG module transforms the electrical activities of the heart into an ECG graph and runs an analysis with machine learning supported, custom-developed smart algorithms to detect arrhythmias including Atrial Fibrillation, Tachycardia, and Bradycardia.
- The respiratory rate is calculated by analyzing oscillations in the PPG signals obtained by the pulse oximeter sensor.
- Height is predicted with the help of algorithms developed by using image processing technology featuring a wide-angle FHD camera.
Hospitals

Value Proposition
- Workforce productivity
- Standardization of measurements
- Transferring the results to the digital environment

Services
- Patient Data Records
- Vital Measurements
- Data analytics
Workplaces

**Value Proposition**
- Recruitment examination
- Periodic examinations
- Polyclinic examinations
- Remote access (telehealth, e-doctor)
- Regular medical monitoring
- Creating/Raising medical awareness
- Preventive medical and risk analyses

**Services**
- Patient Data Records
- Vital Measurements
- Data analytics, trend and risk analysis
- Online doctor consultation
- Challenges and Awards
Fitness Centers
Universities
Shopping Malls
Pharmacies

Value Proposition
- Remote access (telehealth, e-doctor)
- Regular medical monitoring
- Creating/Raising medical awareness
- Preventive medical and risk analyses

Services
- Patient Data Records
- Vital Measurements
- Data analytics, trend and risk analysis
- Online doctor consultation
- Appointment booking system
- Advertising
Technical Specifications

- **Operating System**: Ubuntu 18.04.4 LTS
- **Dimensions**: W: 850 mm, D: 885 mm, L: 1760 mm
- **Weight**: 130 kg
- **Maximum Chair Load**: 250 kg
- **Operating Condition**: 10°C to 35°C, 20% to 85% RH (without condensation)
- **Storage Condition**: -10°C to 60 °C, 10% to 90% (without condensation)
- **USB Audio Output Power**: 3.3 W
- **Touch Screen**: 32 inch LED Capacitive Touch Screen
- **Resolution**: 1920×1080
- **USB Camera Resolution**: FHD (1920X1080)
- **Switching Power Supply Input Universal**: 100-240 Vac/50-60 Hz
- **Switching Power Supply Output**: 18V/3,43 A & 24 V/2,8 A
- **Internet Connection**: Ethernet Cable or 2.4 GHz Wireless Internet (Wi-Fi)

### SpO₂

- **Measuring Range**
  - 0% - 100%
  - 70%-79% ± 3%, 80%-100% ± 2%, the rest are undefined.
  - 1%

- **Accuracy**
  - 0% - 100%
  - 70%-79% ± 3%, 80%-100% ± 2%, the rest are undefined.

- **Saturability**
  - 0%-100%

### ECG

- **Heart Rate Measuring Range**
  - 30-250 beats/minute (bpm)
- **Heart Rate Measuring Accuracy**
  - ±1 bpm or if the heart rate is <100 bpm ±1 bpm
- **Heart Rate Resolution (Increase)**
  - 1 bpm

### Blood Pressure

- **Systolic Measuring Range**
  - 0-255 mmHg
- **Diastolic Measuring Range**
  - 0-195 mmHg
- **Static Pressure Accuracy**
  - ±3 mmHg
- **Pressure Resolution (Increase)**
  - 1 mmHg

### Temperature

- **Measuring Range (forehead)**
  - 32°C to 44°C
- **Accuracy (forehead)**
  - ±0.2°C for the 38.0°C to 39.0°C range or ±0.3°C for the 36.0°C or 38.0°C range
- **Temperature Resolution (increase)**
  - 0.1°C

### Weighing

- **Load Cell**
  - 4 kg-250 kg / 8.8 lb-550 lb
  - 0 kg/0 lb
- **Load Cell Accuracy**
  - ±0.1 kg/0.2 lb