



SMART
INNOVATION
IN HEALTHCARE

ecorensis

Arçelik

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.








Award-winning
Design



- 
- A tall, modern medical kiosk with a large vertical touchscreen displaying the 'corensis' logo. To the right of the screen is a camera mounted on a pedestal. The kiosk has a sleek, metallic finish with blue accents. The background is dark blue.
-  SpO₂
 -  °C
 -  SYS/DIY
 -  BMI
 -  ECG
 -  INFO

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.
EN 60601-1:2006+A1:2013, IEC 60601-1-2:2014, EN 60601-1-2:2015,
EN ISO 13485:2016, EN 60601-2-27:2014, IEC 80601-2-30:2018,
EN ISO 80601-2-56:2017, ISO 80601-2-61:2017

Body Temperature



A





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

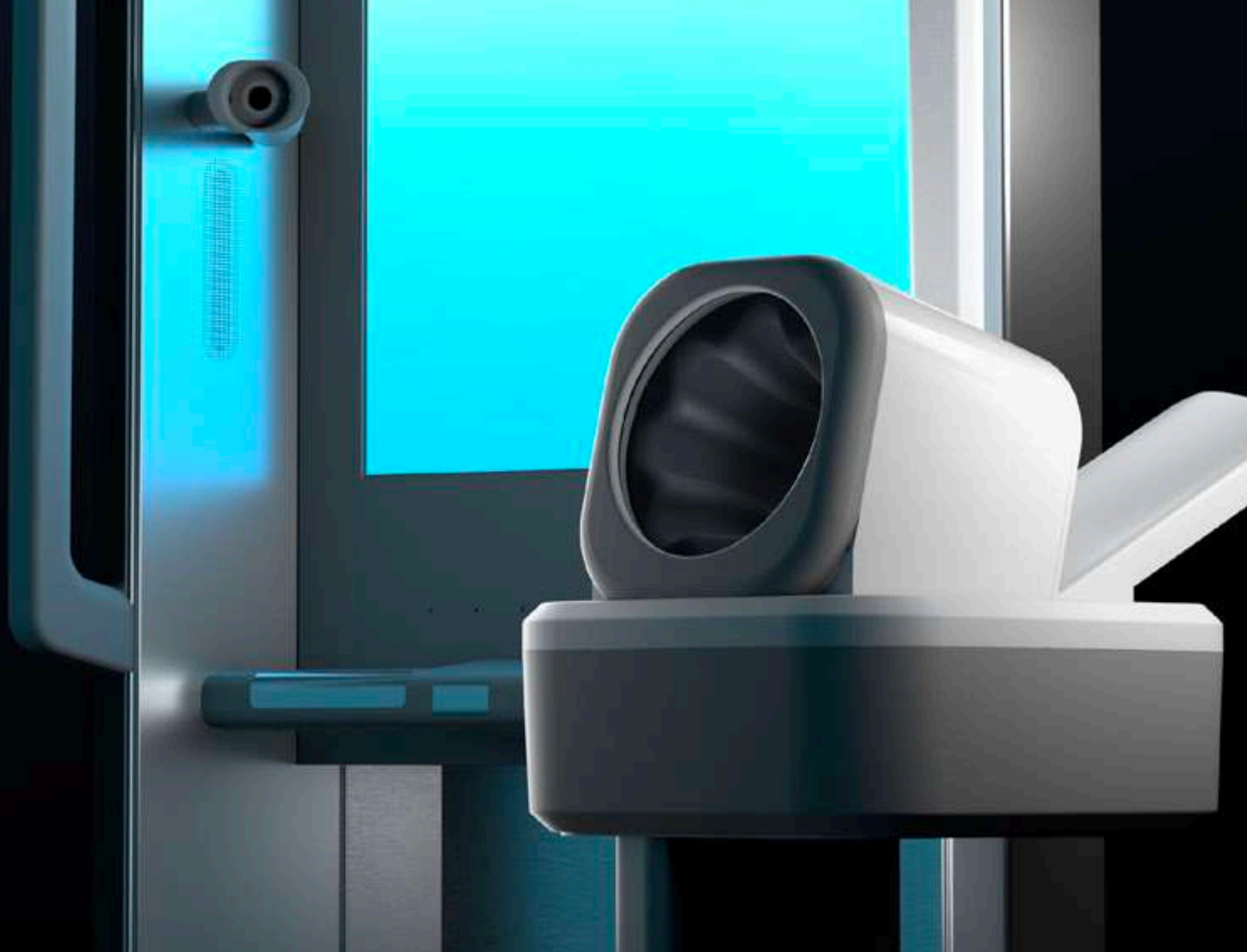


Blood Pressure



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

D



@corensis

Body Mass Index



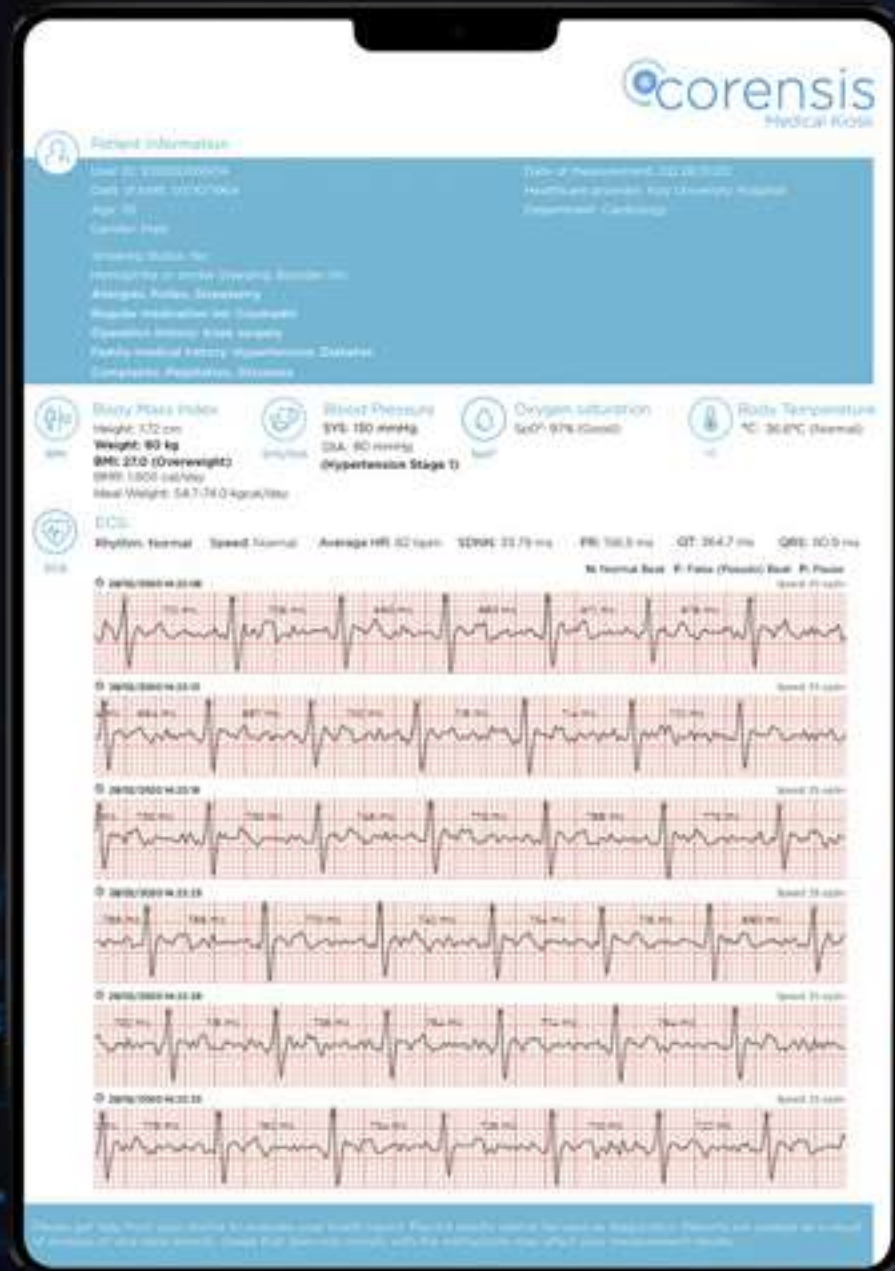
Medical-precision body weight measurement (<250)



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 institutions' preference.

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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.
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The respiratory rate is calculated by analyzing oscillations in the PPG signals obtained by the pulse oxymeter sensor.
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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		1920x1080
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)
SpO ₂	Measuring Range	0% - 100%
	Accuracy	70%-79% ± 3%, 80%-100% ± 2%, the rest are undefined.
	Solubility	1%
ECG	Heart Rate Measuring Range	30-250 beats/minute (bpm)
	Heart Rate Measuring Accuracy	±1% or if the heart rate is <100 bpm ±1 bpm
	Heart Rate Resolution (Increase)	1 bpm
	Systolic Measuring Range	60-255 mmHg
	Diastolic Measuring Range	30-195 mmHg
	Static Pressure Accuracy	±3 mmHg
	Pressure Resolution (Increase)	1 mmHg
Temperature	Measuring Range (forehead)	22°C to 44°C
	Accuracy (forehead)	±0,2°C for the 36,0°C to 39,0°C range or ±0,3°C for the <36,0°C or >39,0°C range
	Temperature Resolution (Increase)	0,1°C
Weighing	Load Cell	4 kg-250 kg / 8,8 lb-550 lb
	Load Cell	0,1 kg/0,1 lb
	Load Cell Accuracy	4,0 kg-100,0 kg ± 0,3 kg
	Load Cell Accuracy	100,1 kg-150,0 kg ± 0,5 kg 150,1 kg-200,0 kg ± 1,0 kg 200,1 kg-250,0 kg ± 1,5 kg



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