Dr. T - Breath Analyser

Inhale, Exhale, and Repeat

Real-Time Non-Invasive Accurate Disease Detection and Comprehensive Health Assessment through High-Resolution Analysis of Gases, VOCs, and Infectious Agents (Bacteria and Viruses) Present in Breath.

Pyrotech

www.dr-t.ai

FEATURES

Dr T_DHANVANTARI : Gas Analyser

Early Diagnosis Through Analysis of Exhaled Gases for Disease Identification

- **Acetone:** Diabetes Indicator.
- **Isoprene:** Associated with Asthma and Lung Cancer.
- **Methane:** Linked to Constipation and Irritable Bowel Syndrome.
- **Ethane:** Associated with Oxidative Stress and Lung Cancer.
- **Nitric Oxide:** Indicative of Asthma.
- **Carbon Monoxide:** Associated with Lung Disease.
- **Ammonia:** Linked to Liver Disease and Kidney Disease.
- **Hydrogen:** Indicative of Small Intestinal Bacterial Overgrowth (SIBO).
- **Carbon Dioxide:** Associated with Respiratory Acidosis and Metabolic Acidosis.

DR T_SWAASA: Breath Analyser

Captures diagnostic metrics through simple inhale, exhale, and repeat cycles, eliminating the need for forced exhale.

Diagnostic Metrics Captured:
- Captures Breathing Patterns
- Monitors Respiration Rates
- Measures Forced Expiratory Volume
- Analyzes Inspiration and Expiration Characteristics

Comprehensive Monitoring:
- Enables monitoring of critical respiratory parameters
- Correlates with conditions like Cystic Fibrosis, Sleep Apnea, and Chronic Obstructive Pulmonary Disease (COPD)

Invaluable Data:
- Key for understanding and managing respiratory health, especially during unconsciousness or post-operative recovery.

DR T_BIO SENSOR: Pathogen Analyser

Molecular Analysis for Swift Identification of Infectious Agents, Redefining Timely Diagnosis and Treatment

- Innovative, cost-effective, and patient-centric solution for early disease detection.
- Harnesses the breath's hidden potential for unprecedented insights into health status.
- Customizing treatments for individual health needs by diagnosing specific bacteria or virus loads and prescribing personalized antibiotics or antivirals.
- **Pathogens Detected:** E.coli, S. aureus, S.pneumoniae, K.pneumoniae, P.aeruginosa, E.faecalis, A.baumannii, Influenza virus, HIV, Hepatitis B virus, Hepatitis C virus, SARS-CoV-2 (COVID-19), RSV, HSV.

Use Cases of Dr. T

- **In Hospitals and Clinics:**
  - **Early Disease Detection:** Dr T can screen patients for various diseases, enabling early diagnosis and treatment, and improving chances of successful recovery.
  - **Monitoring Chronic Conditions:** Dr T allows patients with conditions such as asthma, COPD, or cancer to regularly track and adjust their treatment as necessary.
  - **Infectious disease control:** Dr T rapidly identifies patients with diseases like COVID-19 or tuberculosis, facilitating prompt isolation and treatment to curb further spread.
- **In Homes:**
  - **Personal health tracking:** Dr T enables individuals to monitor overall health, identify risks, and make lifestyle adjustments for improved well-being.
  - **Managing chronic conditions:** Dr T allows individuals to monitor their condition at home, reducing the necessity for frequent hospital visits.
  - • **Remote patient monitoring:** Healthcare providers utilize Dr T to oversee patients with chronic conditions remotely, ensuring timely care and support.
- **In Workplaces:**
  - **Employee Health Screening:** Dr T aids employers in screening for health conditions, enhancing workplace safety and productivity.
  - **Workplace Hazard Monitoring:** Dr T detects harmful airborne substances like chemicals or toxins, ensuring a safer work environment.

- **In Schools:**
  - **Respiratory Infection Early Detection:** Dr T screens students for respiratory infections, preventing illness spread in schools.
  - **Asthma and Allergy Monitoring:** Dr T helps students with asthma or allergies monitor and manage their condition.
- **In Sports and Fitness:**
  - **Athletic Performance Tracking:** Dr T could help athletes monitor breathing patterns and lung function, optimizing training and performance.
  - **Recovery Monitoring:** Athletes could use Dr T to monitor recovery from injury or illness, ensuring a safe return to activity.
- **In Research:**
  - **Disease Mechanism Study:** Dr T aids researchers in exploring disease mechanisms, paving the way for innovative diagnostic and treatment strategies.
  - **Therapy Testing:** Dr T assesses the effectiveness of new therapies for respiratory and other diseases.

Enhanced Breath Analyzer Integrated with Big Data, ML, and AI

Dr. T
SMART APP

Breath Analyzer

Aayush Lakkad
January 20 5:32 PM

P00581455774257 • 28 years • Male •58.0 KG • 179.0 cm

FLOW

TEST RESULTS

Respiratory Rate	Tidal Volume
12.336 cycles/min	**0.149** liter/s
Inspiration Velocity	Expiration Velocity
0.025 m/s	**0.024** m/s
Inspiration Volume	Expiration Volume
0.155 liters/s	**0.143** liters/s

- **Comprehensive Health Profile:**
  - **Centralized Platform:** Offers users a centralized platform for accessing vital health data.
  - **Inclusive Data:** Includes basal body temperature, heart rate, blood pressure, and more.
  - **Medical Reports Access:** Provides instant access to scanned path lab reports, X-rays, MRI, and CT scan reports.
- **Predictive Analytics:**
  - **Ongoing Data Forecasting:** Utilizes ongoing data inputs for forecasting potential health outcomes.
  - **Early Warning Signs:** Identifies early warning signs of diseases.
  - **Empowerment:** Empower users to make informed decisions and adopt healthier habits.
- **Artificial Intelligence Insights:**
  - **AI-Driven Algorithms:** Detects subtle patterns and trends over time using AI-driven algorithms.
  - **Early Detection:** Enables early detection of health issues long before symptoms manifest.
  - **Professional Insights:** Offers healthcare professionals real-time insights and personalized recommendations for each patient.

- **IoT Data Integration:**
  - **Seamless Integration:** Integrates data from various IoT diagnostic and wearable health devices.
  - **Instant Updates:** Provides users with instant updates on their health status.
  - **Timely Actions:** Enables timely actions and interventions for proactive health management.
- **Vision for the Future:**
  - **Dynamic Synergy:** Envisions dynamic synergy between artificial intelligence and the Dr T SMART App's data.
  - **Advanced Language Processing:** Integration with advanced language processing capabilities.
  - **AI-Driven Health Assistant:** Enables meaningful conversations with an AI-driven health assistant.
  - **Revolutionizing Patient Engagement:** Streamlines diagnosis and treatment, revolutionizing patient engagement.
- **Empowering Health Control:**
  - **Future of Healthcare:** Positioned as the future of healthcare.
  - **User Empowerment:** Empowers users to take control of their health.

Pyrotech Electronics Pvt. Ltd.
Address: E-329, Road No. 12, Mewar Industrial Area, Madri, Udaipur-313003
Mobile: +919529244111, +919116643376
Email ID: kuldeep@pyrotechindia.com
Website: https://pyrotechindia.com/

⊕ www.dr-t.ai