alveofit®

®

Advanced Airway Oscillometry for Modern Respiratory Diagnostics

New Era of Respiratory Diagnostics

- Advanced Airwave Oscillometry (AOS) using patented dual-mesh excitation module
- Spirometry and FOT available in single device
- Captures small airway dynamics via intra-breath oscillometric analysis
- Auto Calibration device For easy use
- Fast & Easy Test in a few minutes
- Highly Compact and portable Standalone System
- All age range covered.
- Pre-Post Testing enabled and Reversibility reporting

PATENTED TECHNOLOGY

ISO 13485:2016

ISO 10993

CENTRAL DRUGS STANDARD CONTROL ORGANISATION CDSCO CDSCO सत्यमेव जयते MINISTRY OF HEALTH, GOVERNMENT OF INDIA

FCC

alveoflow®

BREATHING
INSIGHT
REIMAGINED

Precision, Ease &Insight

TRUE TIDAL BREATHING	No forced maneuvers required — patients breathe naturally for accurate, reproducible data.
NEXT-GEN FORCED OSCILLATION	Dual-band multi-frequency waveform (5–40 Hz) with enhanced signal-to-noise ratio.
INTRA-BREATH RESOLUTION	Capture full resistance-reactance profiles across every breath in real time.
AI INTERPRETATION ENGINE	Auto-classifies patterns (Normal, Central, Peripheral Obstruction) with adaptive thresholds based on demographics.
FAST TESTING WORKFLOW	Full measurement in under 20 seconds; complete session with 3 repeats in <2 minutes.
SMART CALIBRATION	Self-check and adaptive reference calibration in <20 seconds, eliminating manual steps.
CLOUD CONNECTIVITY	Secure wireless data sync, EMR integration, and telehealth reporting.
ADULT & PEDIATRIC READY	Built-in normative datasets for ages 4–99 years, auto-adjusted by age and height.
PRE-POST BRONCHODIALATOR COMPARISON	Automated analysis with visual gauge for treatment response.

MARKET CLEARANCES

INDIA

Please contact us for most latest clearnace updates.

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Technical Specifications

Device Name	alveoflow® FOT System
Medical Device Class	Class B
Test Duration	15–30 s
Reproducibility	±3 % (Resistance), ±5 % (Reactance)
Flow Range	0–2 L/s
Method	Forced Oscillation Technique (FOT)
Accuracy	<2 % deviation from standard reference loads
Noise Level	<25 dBA (silent operation)
Technology	Advanced Airwave Oscillometry (AOS) using patented dual-mesh excitation module
Waveform Type	Pseudo-random and chirp signal hybrid
Frequency Range	5 – 40 Hz (high fidelity up to 60 Hz optional)
Data Output	R5, R20, R5–R20, X5, AX, Fres, ALX, intra-breath R/X loops
Sampling Rate	200 Hz digital acquisition, 24-bit precision
Compliance	ERJ 2003 (22:1026–1041) and ISO 23747:2015
Display	10″ capacitive touchscreen with interactive data plots
Connectivity	Wi-Fi , Bluetooth 5.3, USB-C, optional Ethernet
Software	alveoSenseAI™ and alveoConnect platform for analysis, report generation, and cloud storage
EMR Integration	HL7 / FHIR compliant
Security	AES-256 encrypted data transmission
Operating Environment	10–45 °C, 10–90 % RH (non-condensing)
Quality / Medical Devices / Electrical Safety Standard	ISO 13485, MDSAP Systems ISO-26782:2009, ISO-23747:2015, IEC 60601-1, IEC 60601-1-11, IEC 60601-1-2, ISO-10993-1, ISO-10993-5, ISO-10993-10, ISO-10993-23, FCC ID 2AV9TD8-52832-01, FDA 510K (Pending)

alveoflow®

Beyond Spirometry — Precision, Ease, and Insight

alveoFlow™ brings a new standard to respiratory assessment, combining cutting-edge oscillometry technology with AI-powered analytics to deliver unmatched clarity on small airway function — all in a compact, patient-friendly device.

Clinical Insights

Visual Patterns and Interpretation

Green-to-Red Gauge clearly indicates patient position relative to normative ranges.

AI-assisted interpretation highlights small airway dysfunction, bronchodilator response, and disease progression trends.

Applications

Early detection of Asthma, COPD, Post-COVID airway remodeling, and Transplant monitoring

Ideal for research, clinical trials, and routine pulmonary testing

Easy of use

- **Plug-and-Play Setup** — ready in under a minute.
- Automatic Artifact Detection — filters coughs, leaks, and tongue movements.
- Voice and Visual Prompts — guide patients throughout the test.
- Daily Calibration Reminder — ensures reliable results with minimal maintenance.

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All specifications, features, and descriptions are subject to change without prior notice as part of our commitment to continuous product improvement.