



COVID-19 Solutions

BIRAC Supported In-Market Products and Technologies

INDEX

S. No.		Page No.
1	Hybrid Multiply Face Mask	1
2	GOassure	2
3	GOassure LITE	2
4	Nano AgCide Technology	3
5	PathoDetect	4
6	PCML- Portable Compact Mobile Lab	5
7	LaBike	5
8	Sensit Rapid	6
9	COVID-19 Detection Kits	7
10	SARS-CoV-2 Diagnostic Kit	8
11	COVSCAN q-PCR 96	9
12	Quantiplus Detection Kit	10
13	Net4Medix	11
14	ATOM	12
15	FeverTest	13
16	Dozee	14
17	ReMeDi	15
18	upBeat	16
19	Nemocare Raksha Plus	17
20	Daksh	18
21	VapCare	19
22	Saans-CPAP	20
23	Fetal Lite	21
24	NeoBreathe	22
25	CPAP Device	23

26	Hand Cranked Defibrillator	24
27	Emvólio	25
28	LungIQ	26
29	Oxygen Concentration Technology	27
30	PSA Medical Oxygen Generator	28
31	Anupath	29
32	Smart Stethoscope	30
33	Covid Care	31
34	Face Shield	32
35	Suraksha PPE Kit	33





Parisodhana Technologies Pvt. Ltd.

Hybrid Multiply Face Mask



A Substitute For N95 Respirator Manufactured Using Filtration Media

It Offers high particulate (>90%) and bacterial filtration efficiency (>99%) while ensuring high breathability, comfort, and convenience in tropical conditions through pure hand weaved cotton contact materials.







GOassure



A Solution that Assures Good Hand Hygiene Practices, Ensures Compliance Monitoring, and Automates Hand Hygiene

MicroGO LLP

GOassure

India's First Smart Hand Hygiene Solution Assuring Good Hygiene Practices

Maroco

Contactless & optimized volume dispensed In-built LCD display for easy guidance Ensures 20 secs of hand hygiene compliance IoT enabled, real-time compliance monitoring RGB lighting indicators to guide user through the process

Chennai International Airport, Chennai Domestic Airport, Hyderabad, Calicut, Guwahati, Baroda, Pune, Kolkata, and Goa have installed GOassure. It is also installed at various public and private spaces like Taj group of hotels, IRCTC kitchens, Farm aggregator Waycool, Banks, among others.

> 500+ Units Sold

COST: Available on Request



care@microgo.in





Weinnovate Biosolutions Pvt. Ltd.

Nano AgCide Technology

Non-Alcoholic Aqueous Based Colloidal Silver Solution Made For Disinfecting Hands And Environmental Surfaces

Silver nanoparticles have antiviral efficacy against many viruses.

Synthesized from Green technology, free from hazardous chemicals and has no risk of flammability compared to alcohol-based disinfectants.

Colloidal silver can affect COVID -19:

Spread by blocking the RNA replication. Infectivity by blocking the surface glycoproteins.

FIDA

Patent filed for process of making colloidal silver **COST:** INR 450 for 500 ml







Mylab Discovery Solutions

PathoDetect

RT-PCR Kit For The Detection Of COVID-19 Viral RNA In Samples



This was the first commercial kit to receive approval for COVID-19 testing in India.

It is a highly sensitive real-time PCR test for novel coronavirus 2019 detection.

It includes all reagents required to perform the test. Synthetic Positive controls are provided for the validity of the test and internal control for quality check throughout the procedure is also included.

Commercialized with ICMR Approval **COST:** INR 1200 per test Manufacturing License is obtained from CDSCO



1800-121-8684



Accuster Expert In Vitro Diagnostics

Accuster Technologies Pvt. Ltd.

PCML

Portable Compact Mobile Lab

A Compact Portable Clinical Lab With An Open System In A Suitcase For Use In Cities And Remote Locations

Accuster Technologies Pvt. Ltd.

La-Bike

La-Bikes May Travel From One Emergency Center To Other Center Or Nearby Hospital Where Lab Facilities Are Needed The Most

> 76 test can be conducted: such as Hematology, Biochemistry, serology, urine, BP, ECG etc.

All desired validation and certifications from recognized institutions for the mobile lab.

The Mobile Lab is very useful in emergency hospital set ups & disaster relief set ups prepared to deal with COVID 19 emergency. If the lab is available with the doctors, timely treatment will be available and would save many lives.

3000+ Units Sold COST: La-Bike at INR 8.05 Lakh

COST: PCML at INR 4.36 Lakh



+91 8010100088



Preventive (Diagnostic Medical Device)



Ubio Biotechnology Systems Pvt. Ltd. SENSIT Rapid

Detects COVID-19 Spike Antigen Of Viral Origin From A Nasal Swab In A Very Short Time In Human Samples

The kit is a chromatographic immunoassay for the qualitative detection of the specific antigens to COVID-19 in human nasopharyngeal swab.

(2)

to

「日

	Visually read lateral flow assay	Ass temper is 4-3	rature	Assay time is 10-15 min.				
	It comes with individually packed cassettes with desiccant as a pack of 10T, 25T, and 50T.			The kit uses a pair of monoclonal antibodies to detect the antigen, making the kit highly specific, sensitivity of 86% and specificity of 100% and a shelf life of 24 months.				
ICMI Approt		COS INR 17 tes	o per		sales@biohouse.in 91-124-4210598			





Viral Transport Medium (VTM)

Sterile Kit for Collection and Transformation Specimens Containing Wrises

SPILE Viral Transport Medium (VTM) AC



RR Animal Health Care **IIT Guwahati COVID-19 Detection Kits**

Virus Transport Media (VTM) Kit For **Collection & Transportation Of Clinical Specimens Containing Viruses**

> Solution for collection and transport of SARS-CoV-2 with one each Nasopharyngeal & Oropharyngeal specimen collection swabs.

Developed in collaboration with Indian Institute of Technology, Guwahati (IIT-G) and approved by **CCMB-Hyderabad** for ICMR-Delhi.

Kit consists of a comprehensive solution specially formulated for the collection and transport of SARS-CoV-2.

It is suitable for the collection, transport, maintenance, and long-term freezer storage (72 hours) of viral specimens.

ICMR Approved **COST:** *INR 110*





Yaathum Biotech

Yaathum Biotech SARS-CoV-2 Diagnostic Kit



Detects nucleic acid from SARS-CoV-2 in 2 hours

It comprises of primers and probes, that target 3 different regions in genomic RNA of SARS-CoV-2 and RNAse-P as internal positive control.

RNA is isolated from upper and lower respiratory specimens like nasopharyngeal or oropharyngeal swabs.

ICMR Approved COST: INR 70 per test



Preventive (Diagnostic Medical Device)



COVSCAN

RT q-PCR TESTING KIT



NextGen InVitro Diagnostics Pvt. Ltd. **COVSCAN q-PCR 96**

Corona Virus RT q-PCR Testing Kit

It works for clinical samples including bronchoalveolar lavage fluid (BALF), Oral Nasopharyngeal swabs and saliva specimens.

It is a One-step Multiplex Assay:

	Multiplex single tube confirmatory test		3-gene single step assay – N, ORF1b and RNaseP as IC		Lowest 1 1copy	
Sensitivit (>96%) ar specificit (>98%)	96%) and which can becificity HEX/VIC		PCR ents n read C and as Red	High throughput of 96 tests in a single run		Results within 60 minutes
COST: INR 80 per test				©ngivd.con \$ 11-2651118		





Huwel Lifesciences Pvt. Ltd.

Quantiplus® Detection Kit

CORONA VIRUS (2019nCoV) Detection kit



ICMR approved Real time Qualitative PCR kit.

Offers a one-stop solution, which includes detection kit, extraction kit, molecular transport medium (MTM) and swabs for sample collection. Kit has synthetic gene cloned in a plasmid (small DNA molecule within a cell that is physically separated from a chromosomal DNA and can replicate independently). Kit is based on published protocol of Centers for Disease Control and Prevention (CDC).

Manufacturing Reagents & Kits follow GMP guidelines under ISO 7 and 8 environments.







Technologies

Periwinkle Technologies Pvt. Ltd.

Net4Medix

A Multispecialty System Intended To Be Used By Doctors/Caregivers To Receive Diagnostic Data From The Patients And Provide Related Consultation Remotely



Primary Goal

Enable effective management of positive patients / suspect positive patients of COVID-19.

Provide a pre-determined level of remote support to non-COVID-19 patients who need medical assistance.

Secondary Goal

Self-reporting and remote consultation to non-COVID-19 patients who need medical assistance e.g. NCD patients (diabetic, cardiovascular, cancer), Pregnant women, Postoperative, Geriatric, Pediatric, etc.

Self-reporting

Direct Status of Home Quarantined Patients as well

Monitoring Disease Control Status

Reporting of Infection by health facility, Area-wise Dashboards (numbers, counter measures)

Monitoring Quarantine Facility

Patient Registration at Facility, Reporting, and Dashboards

200+ Units Sold COST: INR 13000 for 500 Patients per Year







Cardea Biomedical Technologies Pvt. Ltd.

ATOM

Empowering Health Care Workers to Perform Treatment of Covid19 Patients With Confidence



Heart Patients are more prone to the Corona virus disease severity. During treatment of Covid19 patients with hydroxychloroquineazithromycin, it is essential to:

Perform ECG and calculate QTc evaluation Identify and correct electrolyte imbalances Avoid nonessential QTprolonging medications

ATOM ECG allows capture of a medical grade 12 lead ECG over a smartphone with immediate remote expert consultation. The recorded ECG can be instantly sent to a cardiologist for their expertise before administering the drugs and also continue a follow-up during the course of the treatment.

200+ Units Sold **COST:** USD 799 per Unit







Niramai Health Analytix

FeverTest

Automated Screening Of Population To Look For Likely Covid-19 Infection By Checking For Fever Plus Associated Respiratory

Diseases



Facial Temperature of all people walking into a facility is measured remotely using a thermal camera.

NIRAMAI Computer Vision technique identifies people with suspected fever. A simply skilled health worker is sufficient to conduct the test, thus reducing the pressure on clinical testing.

The Solution is provided by a collaboration between 3 startups.





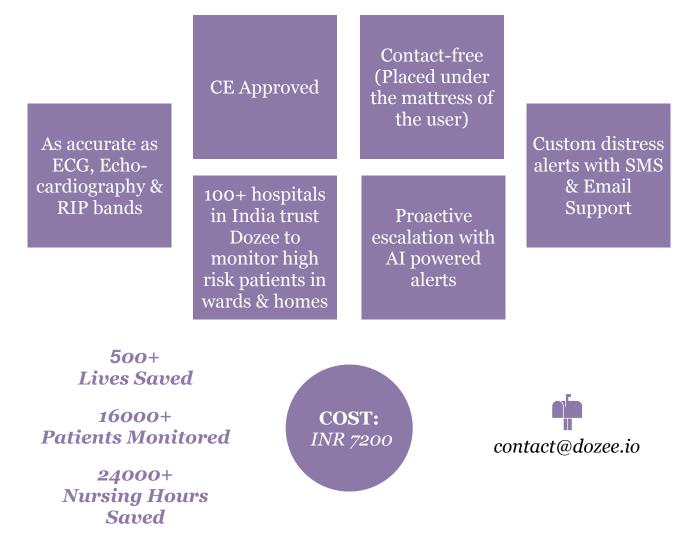
Turtleshell Technologies Pvt. Ltd.

Dozee

Dozee Converts Any Bed Into A Step-Down ICU Like Continuous Health Monitor In Less Than 2 Minutes Of Set-Up



Dozee provides the data of the entire ward on a single screen from where patients' health can be easily managed, and early distress signs can be caught. All this from a safe distance without risking the chances of infection for the healthcare staff.





ReMeDi



Neurosynaptic Communications Pvt. Ltd. **ReNeDi**

Fully Wireless And Mobile Based Medical Devices For Healthcare At The Doorstep

> State of the art Android based portable devices

Multiple diagnostic parameters like ECG, BP, Heart Rate, Oxygen Saturation & Temperature

Low Power Bluetooth connectivity to the Tablet /Mobile Phone Powered by Lithium Polymer rechargeable battery – extremely Power Efficient

100+ Units Sold COST: INR 2.5- 3 Lakh



ReMeDi-NOVA





Monitra Healthcare Pvt. Ltd.

upBeat

Remote Monitoring Of Individual's Critical Parameters



upBeat® has the most advanced bio-sensors which makes remote monitoring easy for patients with critical parameters like ECG, Respiration Rate, Pulse Rate/Heart Rate, SpO2 & Temperature.

upBeat Biosensor

No wires, slim profile, discreet, worn up to 7 days, can bathe as well

upBeat Data Lake

Holds a vast amount of raw data in its native format, used for analysis.

upBeat App

Logs symptoms, receive data from biosensor relays to upBeat cloud.

upBeat.AI

Analyses data, personalizes alerts & reports allow online access

Significantly reduces the risk of exposure to healthcare workers, could reduce the increasing demand of PPE and other logistics.





Nemocare Wellness Pvt. Ltd.

Nemocare Raksha Plus



Continuous Monitoring Wearable Device

Wearable device for remote monitoring of health parameters of confirmed positive cases.

Clinical validation for normal use is ongoing at Narayana Netralaya with good results. Has been tested on adults and children. Data read on dashboard.

It can record sound and play it back for cough analysis.

A device that will aid in remote monitoring of vitals along with geolocation and prognosis of affected and quarantined patients. It will also aid in tracking their symptoms and the doctors will be alerted on detection of deterioration. It will be easy to understand the disease itself by monitoring positive cases which will help biopharma companies and academic institutes that are developing therapies by helping understand the efficacy and effectiveness on candidates.







monitoring tool for an automated partograph generation



During the labor phase, women visit hospitals and get admitted for at least 48 hours. They are exposed to the risk of COVID-19. Doctors visit them frequently which increases contact and SBAs (Skilled Birth Attendants) are assigned to labor rooms also in constant contact.

With DAKSH, these problems can be taken care of.

Remote Monitoring

The doctors can guide the nurses without visiting them. The progress of labor can be seen by the doctor remotely.

Patient Management

Multiple patients will be seen on one screen, audio and critical alerts will be given based on the complications and reminders for the measurement of vitals.

Digital Documents

This is a paperless system, automated partographs are generated and case sheets will be maintained digitally. This means less contact and less exposure. This also gives unlimited cloud storage.

Daksh: 115 Units Sold

Keyar+Daksh: 15 Units Sold





INNACCEL

Coeo Labs Pvt. Ltd.

VapCare

Automated Secretion Clearance And Oral Hygiene Management System For ICU Patients On Ventilators



VapCare is a holistic system that clears secretions from three locations (oral, oropharyngeal, subglottic) and performs oral lavage to comprehensively reduce the risk of Ventilator-Associated Pneumonia (VAP) in patients.

Automated oral lavage: Userdefined suction frequency and pressure

Automated port block detection and management

Sensorcontrolled suction duration Compatible with standard ET, CASS/SSD, and tracheostomy SSD tubes

10 Units Sold





INNACCEL Coeo Labs Pvt. Ltd. Saans-CPAP

A Neonatal Continuous Positive Airway Pressure (CPAP) Support



A novel, affordable neonatal CPAP designed for transport of neonates in RDS, low resource, low skill settings.

> It is a portable, easy to use, robust, neonatal CPAP device to provide breathing support for infants suffering from Respiratory Distress Syndrome (RDS).

Saans offers breathing support to neonates before and during transport to a NICU for longer-term care.

60+ Units Sold **COST:** INR 6 Lakh per license per year





INNACCEL

Sattva Medtech Pvt. Ltd.

Fetal Lite

A CE Class 2A Certified Fetal Heart Rate Monitor for Women in Labor

Expecting mothers and babies are vulnerable populations during the Covid-19 pandemic. It is highly risky for mothers to go to hospitals as there is a risk for infection. Only high-risk mothers are being asked to come to hospitals while other mothers are finding midwives/ home delivery options.

The right monitoring equipment is not available for mothers at home. Conventional monitoring equipment is not designed to be used at home as it needs a skilled operator, infrastructure and is not portable. This can lead to higher number of fetal distress cases not being detected, and maternal and fetal mortality during home births.

How can Fetal Lite help?

Fetal Lite has been designed for home use by low skill operators, in extreme scenarios mothers or family members can easily perform scans. Fetal Lite also has a remote monitoring capability - which can allow Obgyns to remotely receive scan reports and identify high-risk mothers who need to visit the hospital.

Even under normal delivery, monitoring is important. Home monitoring will reduce the number of hospital visits needed.

10 Units Sold **COST:** Available on Request info@sattvamedtech.com

+91 955 250 2860





Windmill Health Technologies Pvt. Ltd.

NeoBreathe

Easy to Use Pedal Operated Infant Resuscitator

NeoBreathe delivers artificial breaths to newborn babies that fail to breathe. It reduces leakage by half and improves ventilation by 20%.

Reduced Infection Risk

Increases the physical distance between patient and operator (for BMV, operator must be very close).

Exhaled air can be routed through a filter (with BMV, infected exhaled air is released freely into the surroundings)

Superior Ventilation

Shows PIP in real time giving feedback on performance and lung condition.

Stronger in-built protection against excessive pressures (Pressure-safety).

Settable PIP. Doctors can preset the specific Peak Insp. Pressure to be delivered with each breath.

Greater Comfort

By freeing both hands and employing highly ergonomic foot pedal, NeoBreathe increases the comfort of operation while BMV requires a patently uncomfortable, hunched-over position causing fatigue and risk of failure.

200+ Units Sold **COST:** Available on Request contactus@windmillh.com

+91-9811802954





Avyantra Health Technologies





Continuous Positive Airway Pressure (CPAP) Device for Non-Invasive Ventilation & Oxygenation for COVID-19 Treatment

CPAP provides oxygenation Support, Non-Invasive (Soft) & Affordable Ventilation, Low to mid-level Ventilation, Post Ventilation Support & Home Ventilation.







Jeevtronics Pvt. Ltd. Hand Cranked Defibrillator

Battery-less and Reliable



It has been tested for 16,000 chargedischarge cycles thereby making it super long-life world-class product.

For city hospitals, it saves them the cost of battery replacement (usually Rs 12,000 to <u>Rs 35,000 per year</u>). It is designed to international IEC standards for medical devices and has been tested and approved by the NABL accredited lab.

"SanMitra 1000 HCT" Defibrillator is particularly useful for disaster struck situations (eg. COVID 19). Sequestration areas inside hospitals for Corona victims need lots of defibrillators.







Blackfrog Tchnologies Pvt. Ltd. Emvólio

A Portable Medical Grade Refrigerator

It provides a platform for delivery of vaccines and all other biologicals like blood, serums, viral culture which require to be kept strictly between 2°C and 8°C for up to 12 hours in the field. This device will reduce the economic burden of wasted vaccines. It comes with a continuous temperature monitoring, location tracking, state-ofcharge indication, communication with headquarters via live tracking, and vital statistics for improved coverage. Emvólio's 2-liter capacity enables it to carry 30- 50 vials.

The product has been designed in accordance with WHO PQS E003 specifications.

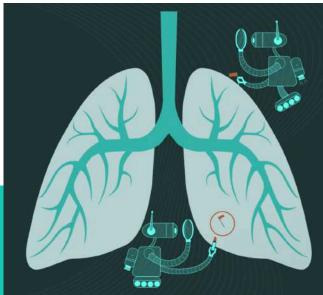






Predible Health Pvt. Ltd. LungIQ

Applied AI on Radiology Imaging for Monitoring Severity of COVID-19 Patients



A Two-Step Product



Artificial Intelligence powered solution that quantifies patterns in lung computed tomographic imaging, providing quantitative metrics on the % of lungs affects with texture changes across a broad spectrum (from ground glass to consolidation).

2

Centralized repository which collects clinical features, radiology imaging and patient outcome data to help public health authorities and hospitals with a data-driven analysis of patient prognostication.

Readiness of Technology

LungIQ has been developed using over 10,000 CTs over the last 1 year with usecase of pulmonary fibrotic diseases. The findings of COVID19 are very similar to that of other infectious and inflammatory diseases and hence we are in a unique position with a ready-to-use product in the fight against COVID-19 pandemic.

> **COST:** INR 6 Lakh per license per year







Indeema Fibres Pvt. Ltd.

Chemdist Membrane Systems Pvt. Ltd.

Oxygen **Concentration Technology**

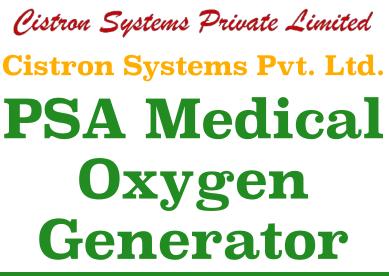
PSA (Pressure Swing Adsorption) Based Oxygen Generation Designed for Medical and In-House Use

CD OXY 08 OXYGEN CONCENTRATOR

In built Oxygen Products for Low and Oxygen purity of 93% high altitude Easv analyzer to +/- 3% at 8 operations Maintenance measure the LPM available purity Customized O₂ generation Oxygen Plants (medical) **Generation plants** of capacity 80 for various LPM to 500 LPM industrial & higher available applications **COST:** info@chemdist.in Available on Request +91 - 9559213333









PSA Oxygen Generators Are A Separate Source To Produce Medical Oxygen On-Site

Reduced dependency of supply of oxygen for a hospital from vendors and complex cylinder logistics on the last mile in times of contingency.

> Manufactures 4 different models of PSA oxygen generators (22, 50, 100 & 200 liters per minute flow rate of medical oxygen).

25 installations in hospitals and health facilities







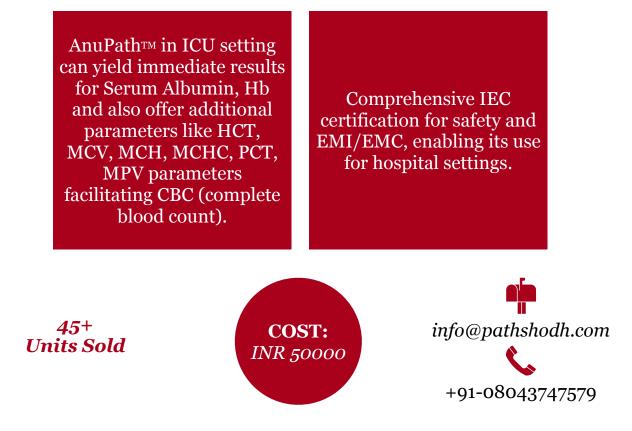
PathSodh Healthcare Pvt. Ltd.

AnuPathTM

Point of Care Hand Held Multi-Analyte Diagnostic Device for Monitoring COVID-19 Patients in ICU and Hospitals



Increased viral load in the COVID patient show decreased concentration of Serum albumin and Hb. It is important to periodically monitor these markers for COVID-19 patients, instantly during ICU treatment.





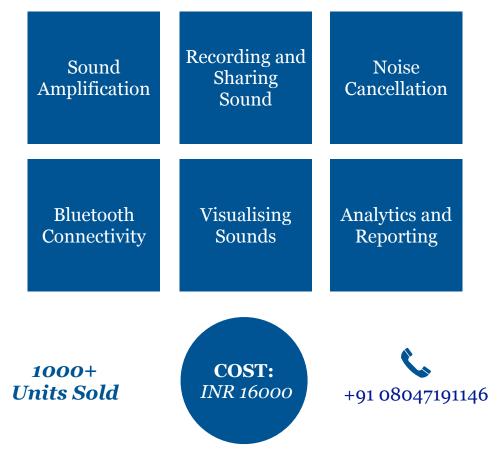
Ayu Devices Ayu Devices Pvt. Ltd. Smart Stethoscope



An Innovative Digital Stethoscope for COVID 19

AyuSynk is n Ai embedded digital stethoscope that facilitates patient doctor distancing through bluetooth enabled module.

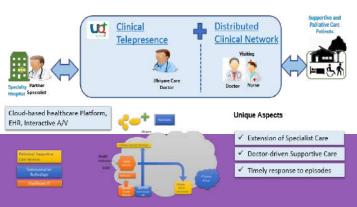
Features include:





Ubiqare Health Pvt. Ltd. Covid Care

Enables COVID-19 Healthcare at Home and Covid Care Centers



Product Features

Cloud-based tele-healthcare platform. Web/Mobile App - Clinical Team/ Patients. Clinical Dashboard for Doctors & DHO. Messaging among doctors and field staff.

Patients

Continuity of Care. Assurance and free of anxiety. Timely intervention in case of symptoms. Preventing avoidable hospital visits.

Services

Dedicated care doctor to a patient.

Tele-consults with Physicians, Pulmonologists and GPs.

Benefits

Visibility of patient condition. Control over patient outcome. Early warning for intervention/admissions.

Aligned to the guidelines for Home Care for Covid patients, issued by MoHFW, GoI

COST: Available on Request Currently functional at St. John's Medical College and Hospital, Bangaluru





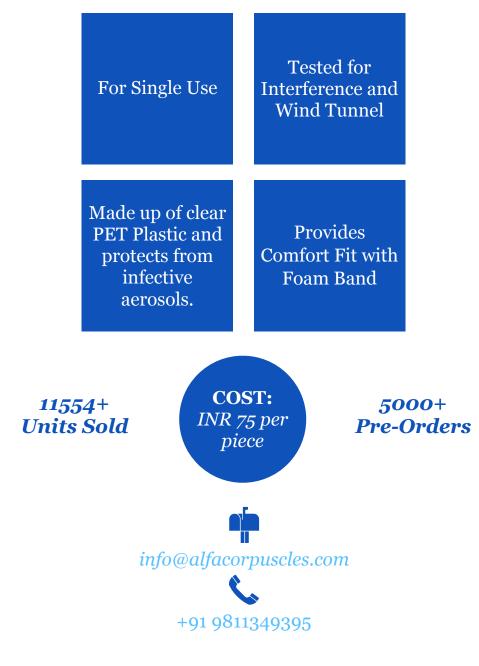


Alfa Corpuscles Face Shield





Protection Against Infective Aerosols







Aarna Biomedical Products

Suraksha PPE Kit

A Holistic Solution For Various Personnel In Vulnerable Environments



The kit comprises of the following items:



Separate PPE kits available for both health and non-health workers.

