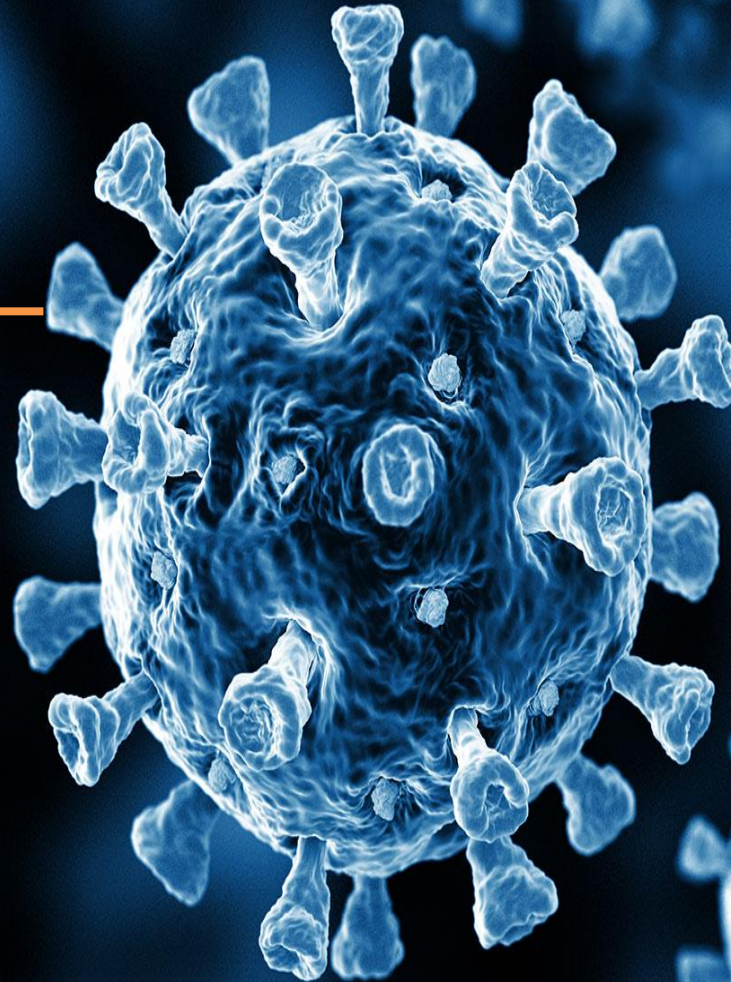


Covid-19

Technology Profile

RELEASE 4.0



C o v i d - 1 9

Technology Profile

R E L E A S E 4 . 0



Central Manufacturing Technology Institute,
(An autonomous R&D Institute under
Ministry of Heavy Industries, Govt. of India),
Tumkur Road, Bengaluru 560 022,
Karnataka, India.

Tel: 91-80-22188302/341/380,
Fax: 91-80-23370428,
Email: techbusiness@cmti.res.in,
Website: www.cmti-india.net.

Products

- 1) Smart Scan
- 2) Automatic UV Disinfectant Unit
- 3) Automatic Sanitizer Dispenser
- 4) Foot Operated Liquid Dispenser (Fold) (Model no. CMTIES02)

Specification:

The Smart scan is AI & ML-based individual Identification and an Elevated skin Temperature Monitoring system.

- A touchless Biometric system that identifies or verifies a person from a digital image.
- Contactless temperature detection using the infrared thermal sensor.
- Visualisation of image and heat map on the display screen.
- Audio output: The speakers give the audio output, i.e., Temperature value, along with the Name of the person.
- Cloud support: the Name, temperature value, time and date are saved in the local/cloud database, which can be used for attendance monitoring.

Level of Development : TRL 7

Status of Commercialization:

Ready for Technology Transfer

Major hardware's to be Utilized:

Raspberrypi 4B, raspberry pi smart touch display, raspberry pi camera, temperature sensor, proximity sensor, speakers, Enclosure and tripod.

Major soft ware's required:

Python, Opencv

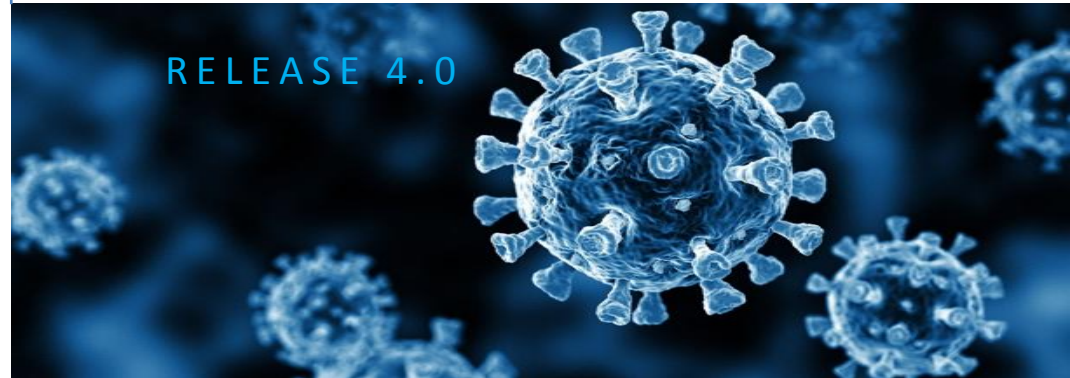
Techno economics :

the smart scan helps to track the attendance data and temperature measurements cost-effectively. Since the entire module is built on raspberrypi the deployment and maintenance costs are also reduced. Therefore it would be a non-contact, automatic and low-cost approach to person identification and temperature detection.

Technology Package:

Smart scan system, Trained model as per the provided image database, cloud-based dashboard and live attendance monitoring feature.

RELEASE 4.0





SALIENT FEATURES

Smart scan can be used as an Automated biometric Authentication system.

Minimizes physical contact/exposure (non-contact system).

Identifies people by their AI-based face recognition technique

Accurately tracks time and attendance

Contactless temperature scanning and deny access to anyone who has high body temperature.

It is a highly secure process in maintaining the database in the server.

Automatic UV Disinfectant Unit



TECHNOLOGY PROFILE

Specification:

100cm X 60cm X90cm, System can be configured to any size as per requirement

Level of Development :

TRL 7

Status of Commercialization:

Ready for Technology Transfer

Packaging Elements for Automated UV Disinfection system:

1 Disinfection system
User Manual
Drawing of the System
Dosage Calculation chart

Major Plant Equipment and Machines required:

Fabrication Shop

Techno economics:

Low cost Indigenous development of technology

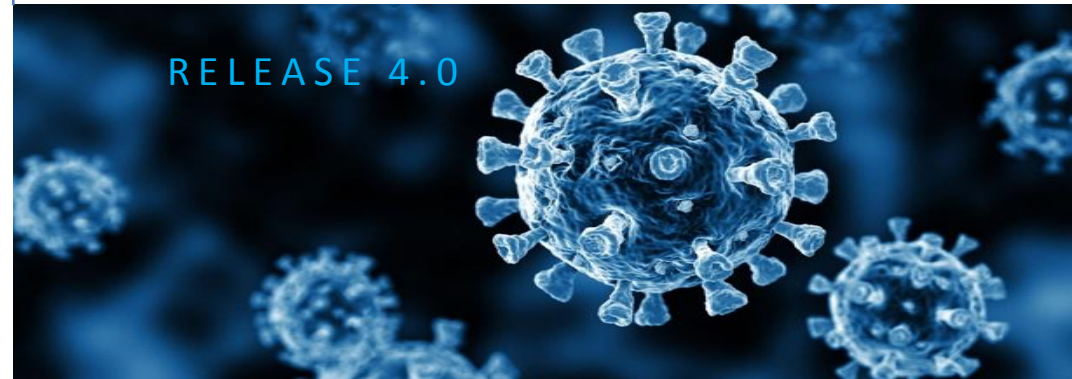
Technology Package:

Product of UV based Disinfection System

Industries / Application include:

General Engineering
Automobile
Pharmaceutical
Medical
E-commerce & logistics
House-hold

RELEASE 4.0





SALIENT FEATURES

Highest Disinfection rate at normal temperature.

Chemical free disinfection process, system can be used to disinfect any kind of surfaces.

Simple to operate, maintain and achieve relatively fast disinfection.

Automatic Sanitizer Dispenser

TECHNOLOGY PROFILE

Specification:

Power rating: 230V, 50hz

Dispensing capacity: 1ml to 10ml

Timer range: 1sec to 10 sec

Direct acting Solenoid valve

Status of Commercialization:

Ready for Technology Transfer

Major Raw materials Utilized:

Solenoid valve with timer

Sensors,

Plastic/ Liquid Container of 8ltr.



Major Plant Equipment and Machines required:

General engineering machineries.

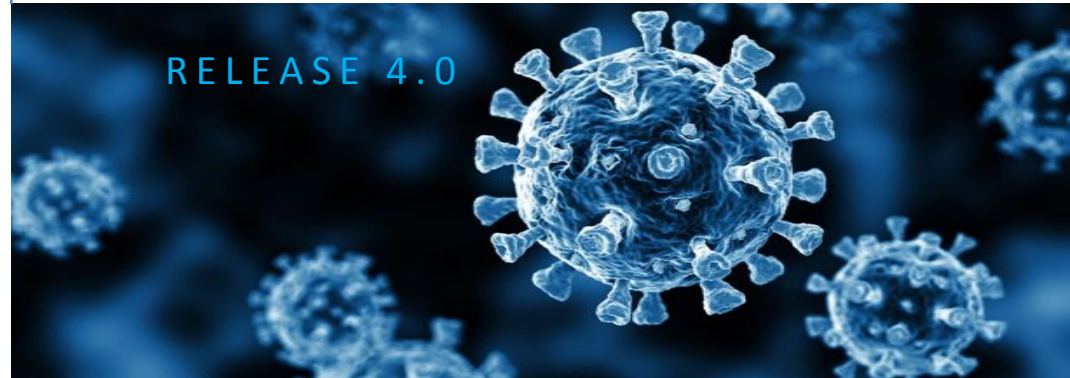
Techno economics :

Made with fully localized materials available within local market.

Technology Package:

Design & Drawings .

RELEASE 4.0





SALIENT FEATURES

Self dispensing with sensor

Suitable for disabled ones

Timer adjustment for different volume dispensing.

Foot Operated Liquid Dispenser (Fold) (Model no. CMTIES02)



TECHNOLOGY PROFILE

Specification:

Max Height of unit : 1 to 1.10m

Capacity of Liquid : 500ml to 1000ml

Unit width : 350mm

Status of Commercialization:

Ready for Technology Transfer

Major Raw materials Utilized:

UPVC pipes and components

CPVC pipes and components

Liquid storage can holder

Tools and consumables required :

Hacksaw/ Cutting machine

Glue

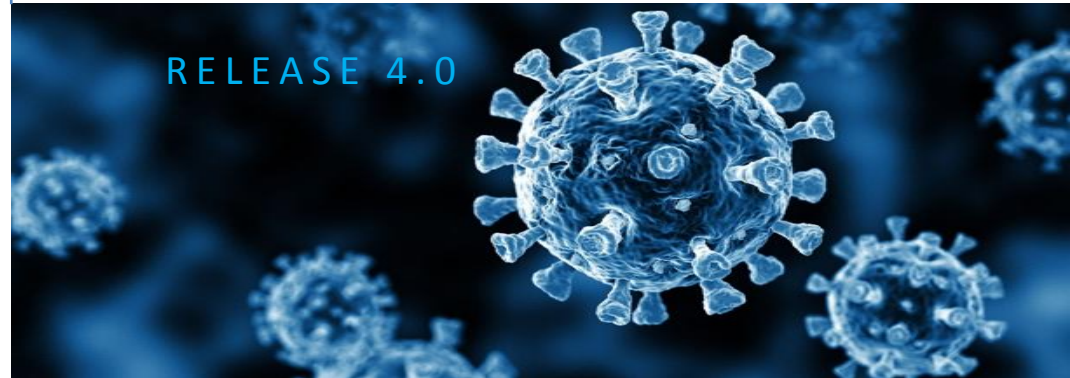
Techno economics :

Made with fully localized materials available within local market.

Technology Package:

Design & Drawings, Test certificate

RELEASE 4.0





SALIENT FEATURES

Easy of Operation (with foot only)

No Power Consumption

Light weight .

No mechanical components required

Zero repair and maintenance.

For further details contact:

Mr. Krishna Rathod
Scientist-E
Centre Head (PP&BD)
krathod@cmti.res.in
+91-80-22188380
+91 (0) 9449842685

Mrs. Sharmila. M.R
SAO & Nodal Officer
Group Head (BD)
sharmila@cmti.res.in
+91-80-22188341/302
+91 (0) 9449842681