

## CSIR-Central Mechanical Engineering Research Institute Mahatma Gandhi Avenue, Durgapur – 713209



## Intelligent Mask ATM cum Thermal Scanner (IntelliMAST)

Intelligent Mask ATM cum Thermal Scanner and (IntelliMAST) is designed indigenously at CSIR-CMERI. IntelliMAST is an Albased intelligent machine working on Deep Learning technology for identification of the person with or without facemask. It has an embedded automatic IR-based thermal scanning mechanism for taking person's body temperature. If the system finds that the body temperature of the person is higher than the permissible limit, it raises an audio-visual alarm, otherwise it enters into the second phase of the scanning process. Here, the system takes snaps of the person using built-in vision system to identify the facial feature of the person. If the system detects that the person's face as a masked face, it prompts the person as "Admitted" with a green light signal mounted on the system. However, if the system classifies the person's face as non-masked face, it



triggers audio-visual alarm and enters into the third phase. The system then prompts for I-Card of the person and if machine detects a valid I-Card, it dispenses one set of facemask to the person and sends his / her details by e-mail to the pre-defined authority for necessary action. The IntelliMAST is designed to be deployed in the outdoor environment and powered with integrated solar setup and electrical grid for 24x7 operation.

## **Key Features**

- Intelligent detection of persons with facemask or without facemask
- > I-Card based Facemask dispensing mechanism along with close-loop electronic controller circuitry
- Automatic thermal scanner for taking body temperature
- High intensity audio-visual alarm for public awareness
- Integrated Solar power set up for standalone operation
- Auto Controlled built-in UV-C light for auto-disinfection of mask packets and other inanimate surface and 10 minute auto-cut operation
- Can be customized as touch less access control mechanism with flap gates / turnstile / barrier gate
- Audio Visual tower type (LED) alarm system

**Application:** The system can be integrated with touch less entry system for the offices, residential complexes, shopping malls etc.

**Technology Transfer Fee:** Rs. 5 Lakh plus applicable GST (for Micro & Small Enterprises)

For business queries please contact

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