

## Applications

- Access Control
- Time-Attendance
- Canteen Management
- Banking & Finance
- Resource & Manpower Management
- School Bus Management & Tracking
- Insurance Claim Processing
- eKYC



## Features



STQC L1 & FBI PIV Certified Fingerprint Scanner



13.56 Mhz Contactless Smart Card Reader



Auto Sleep & Wakeup to Save the Battery Power



Optimized Thermal Management



4000 mAh Battery Backup



5MP AF Front Camera with Flash LED



Ethernet / LAN Connectivity



Android Operating System



micro SD Card Slot Supporting up to 32GB Storage



Barcode Reader with Camera



Scratch Free Sensor Surface



MINEX Compliance Extractor



Auto Finger Detection

# L1 AADHAAR ENABLED BIOMETRIC ATTENDANCE SYSTEM

## MBAS20

With the aid of an advanced biometric algorithm and PIV/STQC L1 certified FAP10 scratch-free optical biometric fingerprint sensor, Mantra's 7" L1 AEBAS Device MBAS20 is created to meet the need for precise individual identification for various applications like eKYC, access control, and time attendance.

The MBAS20 can be used as a wall-mounted device for access control and time-attendance applications. The device's capacitive scratch-resistant touch screen with 6H toughened glass, and optimized thermal management makes it very robust. The latest biometric technology is used by MBAS20 to authenticate and identify users using their own fingerprint impressions. With built-in 4G, Ethernet, wireless, & GPS, the device displays increased connectivity, along with the 4,000 mAh battery with auto sleep & wakeup functionality increases battery backup.



## At a Glance

### Hardware & System

Parameters	Specification
CPU	: ARM Cortex A53 @ 1.5GHz Quad Core Processor
Memory	: 2GB RAM + 16GB Flash
LCD	: 7" TFT LCD with 1024x600 Resolution
Touch	: Scratch Resistant Multi-Point Capacitive Touch Screen with 6H Toughen Glass
Operating System	: Android 10
Front Camera	: 2MP Fixed Focus
Back Camera	: 5MP Auto Focus Front Camera with Flash LED
LED Indicators	: Power On/Off, Battery Charging Status
Audio	: High-Quality 1W Speaker for Announcements
RTC	: Yes
Object Detection sensor	: IR based Proximity sensor for device auto sleep & Wakeup
Control Buttons	: 1x Power On/Off, 1x Reset Key
Operating / Storage Temperature	: 0 Deg - 50 Deg C
Operating Humidity	: 10%-90% RH (Non-Condensing)
Dimensions	: 221 x 181 x 48 mm
Weight	: Approx 0.8Kg
Certifications	: CE, RoHS, BIS, IP54

### Fingerprint Sensor

Parameters	Specification
Fingerprint Type	: Scratch Free Optical FAP10 L1 Sensor
Fingerprint Image	: 276 x 336 Pixels
Image Specs	: 500 DPI +/- 2%, 256 (8 - Bit Gray Level)
Certifications	: CE, FCC Part 15B, RoHS, STQC L1, FBI PIV, EN/IEC 62368-1, IS13252 Part I

# L1 AADHAAR ENABLED BIOMETRIC ATTENDANCE SYSTEM MBAS20



## Smart Card Reader

Parameters	Specification
Contactless Card (Optional)	: ISO14443 Type A/B Cards, MIFARE Clasic 1K/2K/4K, MIFARE DESFire Light 1K, MIFARE DESFire EV1/EV2 4K, MIFARE Plus S 2K, NTAG

## Interfaces

Parameters	Specification
4G/3G/GPRS	: 2G (850/900/1800/1900), 3G (B1/B2/B5/B8), 4G (B1/B3/B5/B7/B8/B38/B40/B41)
Wi-Fi	: IEEE 802.11 a/b/g/n (2.5GHz & 5.0 Ghz)
Ethernet	: 10/100 Mbps
SD Card	: MicroSD Card (Supports up to 32GB)
Bluetooth	: BT + BLE 4.2
GPS	: 16 Channel NMEA Compliant with Flex Antenna, AGPS Supported
SIM Socket	: 1 x SIM Socket
DC Jack	: 1 x DC Power Input
Micro USB	: 1 Micro USB Port for PC Connection as debug port
RS-485 (Optional)	: 1 Host or Slave (Selectable)
Wiegand (Optional)	: 1 Input (26-Bit)
GPIO (Optional)	: 5V TTL 1 x Output, 1 x Input
Relay (Optional)	: 5V/3A Relay with Non-Potential Contacts (NC, NO, COM as Output)
USB 2.0 (Optional)	: USB2.0 Type A (for pendrive connection)

## Electrical

Parameters	Specification
Power Adaptor	: Input AC: 90~265V, 50Hz ; Output DC: 12V/2.0A
Battery Pack	: Li-Ion 4000 mAH Rechargeable & Replaceable Battery