

**Acer  
ETM**

*Move to Cashless on Bus Ticketing*  
**Acer ETM**  
**(Electronic Ticketing Machine)**

**I \ System Module of ETM**

1. Including 7" color LCD Passenger Information Display
2. Driver Console (DC)
3. Contactless Smart Card Readers (CSC Reader)
4. GPS Sensor Module
5. Wireless LAN Module

**II \ Function of ETM**

1. Driver is able to select information such as route, trips and other required information from the driver console.
2. The Driver Console has buttons for selecting current zone/stage as backup for GPS and more than ten (10) configurable buttons.
3. The ETM is capable to store the machine's software version, data and time for reference at any point of time.
4. Secured audit trail – The ETM maintain a transaction log of all significant events that occur in chronological order for the on-bus ticketing system. The data in this transaction log is stored on the ETM until the next initialization of the ETM. This log is printed by authorized personnel only.
5. The ETM is capable of storing at least thirty (30) days of transaction data.
6. The language is English.
7. The ETM is able to support multiple CSC readers that located at separate location such as at entry and exit door.
8. The ETM modules support the following modes:
  - (a) Driver mode;
  - (b) Supervisor mode;
  - (c) Maintenance mode;
  - (d) Enforcement Officer mode;
  - (e) Testing mode;
  - (f) Audit mode.
9. The system captures the time when the driver sign on, end trip and end of duty. A security features are incorporated for login after a selected parameterized time frame and a detection of unauthorized driver IDs.
10. Driver web waybill contains data transfer status with Depot identity either through WLAN or manual transfer.
11. Support various fare rates including flat fare, zonal fare, stage fare, distance based fare and time-based fare.
12. Support the interfaces of the following card types :
  - (a) ISO 14443 Type A;
  - (b) ISO 14443 Type B;
  - (c) ISO 18092 Near field Communication (NFC) protocol.
13. Support 4 SAM slots
14. Support at least 3 different alarm sound



## Features of ETM

1. Unique and innovative
  - A Real on-bus cashless solution
  - Completely resolve the remaining 5% of cash payment issue.
  - Provide a quicker and faster way of card purchasing and top-up
2. Technology integration ability
  - Using Miniaturization technology, making card selling/recharging on the bus
  - Using ICT integration technology, binding top-up, deduction, card purchasing, inquiry functions into one ETM device.
  - Can be further expanded to be as a on-bus marketing service providing device.
3. Practical functions and outlook design
  - Suitable for on-bus environment
  - Comply to the passengers' behavior – Card purchase/top-up in the front door and rapid tapping in/out in the rear door.



### Specifications:

#### Power Requirements

Power Input	DC 20-48V / 2.5A
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#### Mechanical

Dimension (W x D x H)	500 x 420 x 350 cm
Weight	15 kg

#### Environmental

Operating Temp.	0 to 55°C
Storage Temp	-10 to 75°C
Operating Humidity	0% to 99% non-condensing
Storage Humidity	5% to 99%



#### Contact Information

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