

Flexible passenger fare collection device for a variety of ticketing methods. Easy to use and readily accessible for transit passengers.

The Trapeze EZValidator device is a stand-alone on-board processor that provides easy to use and readily accessible methods for the transit passenger to quickly validate their bus tickets and passes. The color display is protected by a durable scratch-resistant surface which is encased in a rugged polycarbonate enclosure. An ample area for barcode on paper or digital media, QR codes or an RFID card make this a flexible passenger fare collection device for a variety of ticketing methods. This Trapeze engineered and U.S. manufactured product will provide years of service and will stand up to the harsh transit environment making it a low risk high payoff solution.

While the fare collection capabilities are automatic, drivers can engage system actions through its bright 3.5" TFT LCD color display which provides excellent readability in ambient or subdued lighting by an internally controlled light sensor, allowing the display to continually adjust the background lighting to meet existing ambient light conditions and further enhance the experience of the transit patron.

BENEFITS

- Allows drivers to fulfill their tasks in a safe manner. All relevant information is shown in an easy-to-read 3.5" color LCD format so passengers can purchase and verify their transit trip easily and with only a glance
- Rugged 3.0" transparent tap window allows transit patrons a large area to quickly pay their fare and find seating, decreasing boarding time
- One location for passengers to scan different types of fare media (bar code or smart media)

- Additional information display via red, yellow, or green indicator lights allowing the driver to quickly determine fare status of EZValidator function
- Easily customized capabilities to suit individual transit agency ticketing operations and reporting guidelines
- Full-color display backlight is controlled by a light sensor adjusting automatically to light conditions of the environment

FEATURES

- Large 2-5/8" x 1-7/8" card reader tap window
- Durable 2-7/8" x 2-1/8" TFT LCD display screen with scratch resistant surface
- Automatic adjustment of brightness to environmental conditions
- Leading edge system architecture
- A rugged yet versatile solution for all ticketing applications



Passengers can scan their cashless payment while they board the bus.

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- Wide Input Voltage Range of 8-36V DC
- Operates on both 12V and 24V Vehicle Power Systems
- Society of Automotive Engineers (SAE) J1455 — Exceeds automotive engineering standards

SPECIFICATIONS

Mechanical Features

- Dimensions: 3–35/64" W x 7–31/64" H x 2–11/64" D [90mm W x 190mm H x 55mm D] (without mounting stand)
- Weight: 1.638 lbs. [0.7432 Kilograms] (without mounting stand)

Power

- Wide Input Voltage Range: 8-36V DC
- Operates on both 12V and 24V Vehicle Power Systems
- Reverse Voltage Protection (50V DC)

User Interface / Display

- 3.5" Color TFT LCD Display, 2-7/8" x 2-1/8"
- QVGA Resolution, Contrast Ratio 800
- Red/Yellow/Green LED Indicator

Backlight

- Backlight type: LED
- Backlight brightness: 500 nit
- Ambient light sensing for switching between day and night modes

Audio Support

- Front Facing Speaker for ADA Compliance

Radio Frequency Identification (RFID), Near Field Communication, (NFC)

- Smart Cards: ISO 14443 A/B, Mifare, ISO FeliCa (NFC)
- Dual SAMs (Secure Access Modules)

Barcode Scanning

- Paper or digital media (e.g. mobile phone or tablet)
- QR Code decoder conforming to JIS X 0510 and ISO/IEC 18004
- Datamatrix decoder conforming to ISO/IEC 16022 and ECC200

Interfaces

- 1x USB 2.0 Port
- 1x SAE J1708 Port
- 1x 10/100 Mb Ethernet Port
- 5x Discrete Inputs, High Voltage Rated (60VDC), Software Configurable Internal 3.3V Pull-Ups
- Battery Voltage Monitor
- RTC (Real Time Clock), High Accuracy
- Software Configurable Power Down Delay
- Internal Watchdog Timer

Wireless Communications

- 802.11 b/g/n Wi-Fi, 2.4GHz, 1x1 (Transmit and receive over single antenna)
- 4-channel GPS Receiver, High Sensitivity, WAAS Support, Positional Error < 2.5 meter
- 3G, 4G LTE Cellular Modem Options

Advanced Processing Platform

- 400MHz Atmel ARM926 Processor
- 0.25 Byte DDR2 RAM
- 0.25 Byte Internal Industrial Solid State Flash
- Mass Storage expandable via micro-SD slot
- Embedded Linux operating system

Temperature Specifications

- Storage temperature: -22 °F to +158°F (-30°C to +70°C)
- Operating temperature range: -4°F to +140°F (-20°C to +60°C)

Environmental and Use Specifications

- SAE J1455, SAE J1113/11 Inductive Switching Transients, Burst Transients, Load Dump Pulse 150V Pulse 5C (Compliance for 12V and 24V Systems)
- SAE J1455 Humidity, 90% RH, Non-Condensing
- SAE J1455 Thermal Shock
- SAE J1455 Mechanical Vibration Appendix A, Fig. A-1
- SAE J1455 Mechanical Shock (Per MIL 202G Method 213B), 20g Peak, 3 Drops / Axis

- SAE J1455 Section 4.7 Dust Test, 5 Hour Alternate Method (1800 g/m3)
- SAE J1455 High Exposure Splash Test
- SAE J1455 Salt Spray Test
- SAE J1455 ESD Packaging & Handling, Direct Contact +/- 4kV
- SAE J1455 ESD Operational (In-Vehicle), Direct Contact +/- 8kV
- FCC 15.109 Class B
- FCC 15.225
- FCC 15.247
- 2010 ADA Standard for ATMs & Fare Machines

TRAPEZE GROUP

Trapeze Group supplies reliable, scalable and innovative solutions for the rail and road transport sector. Hundreds of private and public organizations in Europe, North America and Asia-Pacific have selected software solutions from the Trapeze Group in order to improve and broaden the efficiency, quality and scope of their transport solutions, thus enabling them to provide their customers with even more services in a more reliable and cost-effective manner.

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