VaporVision™

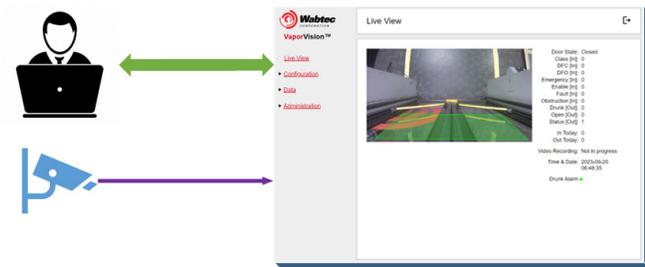## Enhanced Visual Sensing and Monitoring System

Advanced machine vision technology optimizes door operation and provides passenger protection

Challenged to support high ridership while meeting on-time schedules, transit agencies strive to provide a seamless passenger experience for boarding and off-boarding. The leading-edge VaporVision system provides a comprehensive sensing solution that integrates seamlessly with existing Vapor door systems. Using advanced detection technology, unrivaled configurability and connectivity, this system represents a significant leap in transit bus operational efficiency.

Uniquely intelligent sensing and monitoring system

- **On-board camera** – powered by artificial intelligence-based deep learning to deliver a paradigm shift for on-board sensing
- **180° coverage** – detects people and objects, a customized solution with enhanced features tailored to bus manufacturer and transit agency needs
- **Reduces dwell time** – recognizes stream of exiting passengers, holds doors open and eliminates delays
- **Reduces maintenance** – a single integrated smart camera replaces multiple ultrasonic and infrared sensors, mechanical push buttons, tape switches, touch bars, and light beams

Off-Board Capability
- Advanced Monitoring
- Customer specific event recording and playback
- Deployment of custom detection apps.

On-Board Capability
- Obstruction & Passenger detection
- Custom event detection
- Integrated system monitoring

+ Allows passengers to exit without contact with the doors

+ Configurable detection zones customized to unique operational needs: automatic recordings of passenger door interactions and/or any area within field of view

+ Robust components resist dirt, humidity, temperature extremes and vandalism

+ Diverse applications for new vehicles and retrofit installations

VaporVision™
Enhanced Visual Sensing and Monitoring System

Programmable to provide different functions during each phase of door operation

- **Enhanced Setup and Configuration** – setup multiple customizable detection areas over a live video feed, view videos, and configure unique recording triggers using Vapor Live Utility.

- **Enhanced Connectivity** – built-in support for CAN, Ethernet, and Wi-Fi for seamless integration into existing on or off-board infrastructure.

- **Ongoing Video Capture** – time-stamped video capture recordings of all door interactions or create customizable capture triggers.

- **Improved Diagnostics & Maintenance** – connectivity with Vapor Door systems provides chronological visual capture of door activity.

- **Custom Detection Solutions** – using same technology for object and passenger detection, the VaporVision platform can be extended for detection strategies for bus maintenance, operations, and security applications.

Optional Voice Annunciator provides digitally recorded messages.

Specifications

Contactless Detection:	Vision sensing technology detects passengers or specific objects
Sensors:	One camera fixed on door operator baseplate covers entire door portal area
Network Interfaces:	Ethernet, CAN, Wi-Fi
Live Visual Zone Customization:	Yes via Vapor Live Utility
Customizable Data Acquisition Triggers:	Yes
Requires Stand-Alone Setup & Diagnostic Tool:	Vapor Live Setup Utility requires no download or installation, requires only a computer with an internet browser
Robustness to EMI:	Improved immunity to electromagnetic interference
Base Package:	Passenger & obstruction detection / Diagnostic & fault logging / Live visual zone customization / Custom video & data acquisition triggers / Vapor Live Utility
Additional Capabilities:	Passenger counting / Event monitoring and recording / Off-Board remote monitoring
Design Life:	12 Years
Power Supply:	Operating Voltage: 12V DC or 24 VDC nom. 10 VDC min, 37 VDC max. Total System Power Consumption: 30W max.
Temperature Range:	-4º F to 140º F / -20º C to +60º C

Installation – The VaporVision system is mounted on and works with Vapor door systems.

For more information, contact your local Wabtec Bus Solutions representative.

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