



Delivering
performance
proven solutions
for buses



Vapor CLASS[®]

Contact-Less Acoustic Sensing System



Ultrasonic sensing technology optimizes exit door operation and increases passenger protection

- Reduces dwell time – recognizes stream of exiting passengers, holds doors open and eliminates delays
- Reduces maintenance expenses – solid-state CLASS sensors replace mechanical push buttons, tape switches, touch bars and light beams
- Ultrasound sensor system – safe, inaudible and invisible sensors minimize passenger contact with doors
- Reliable performance – solid-state signal processing limits false activations



Uniquely intelligent – multi-functional



- + Allows passengers to exit without contact with the doors
- + Adaptive threshold sensing optimizes system sensitivity and reliability
- + Auto-learn target acquisition eliminates manual entry of fixed targets
- + Detachable coaxial door sensor cables for easy install and replacement
- + Robust components resist dirt, humidity, temperature extremes and vandalism
- + Diverse applications for new vehicles and retrofit installations

Ready to Show



Ready to Quote



Ready to Produce



In Production



Vapor CLASS® Contact-Less Acoustic Sensing System

Programmable to provide different functions during each phase of exit door operation

- **Touch to Open** – functions as touch bar or touch tape for passenger actuation when a door is enabled but is closed
- **Hold Open** – detects exiting passengers and holds doors open, reducing dwell time
- **Contact-Less Sensing** – panel sensors enhance function of sensitive edges, as doors close CLASS enables passengers to exit without contacting doors
- **Proximity Sensing** – while bus in motion, detects passengers standing too close or leaning against exit doors and activates a warning light, an alarm or voice announcement



Optional CLASS Voice Annunciator provides digitally recorded messages



Specifications

Design Life:	12 Years
Power Supply:	Operating Voltage: 12VDC or 24VDC nominal Minimum Operating Voltage: 10VDC Maximum Operating Voltage: 37VDC Transient Voltage Spikes (1 msec. max. duration): +/- 250VDC Total System Power Consumption: 30W max
Sensors:	Operating Frequency: 40 kHz to 125 kHz Robust coaxial cable, easy to install or replace Panel sensors equipped with replaceable cables
Computer Interface/Diagnostics:	USB
Vehicle Interface:	J1939
Temperature Range:	-4° F to 140° F / -20° C to +60° C

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

Vapor Bus International, A Wabtec Company

1010 Johnson Drive, Buffalo Grove, Illinois 60089
Tel: 866-375-4126 / Fax: 847-520-2222
www.vapordoors.com
Email: WabtecBusSolutions@wabtec.com

Bulletin No. 53-2002 © 5-2021 Printed in U.S.A.

U.S. and foreign patents are applicable and/or pending to products described and illustrated herein. Vapor, Vapor Bus International, and vShield are registered trademarks of Wabtec Corporation.

Vapor reserves the right to discontinue products or change product specifications or designs at any time without notification.

www.WabtecCorp.com