



### Features

- New EMC approved enclosure
- Buy America compliant
- Integrated 4-inch TFT color display
- Integrated test antenna
- Watertight durable housing

### Benefits

- Compact in size
- Light weight

### Introduction

The Portable Vehicle Test System (PVTS) is a new generation of test equipment specifically designed for testing Light-Rail Vehicles equipped with a VECOM bi-directional communication system. The main features of the PVTS are: removable integrated test antenna with an extra-long interface cable enabling the user to easily locate the antenna in the vicinity of the vehicle transponder under test, an easy-to-read 4-inch color display allowing the received vehicle information to be reviewed on site and user-friendly software which allows easy configuration of the PVTS for additional communication messages.

### Basic Functionality

The basic functions of the PVTS are:

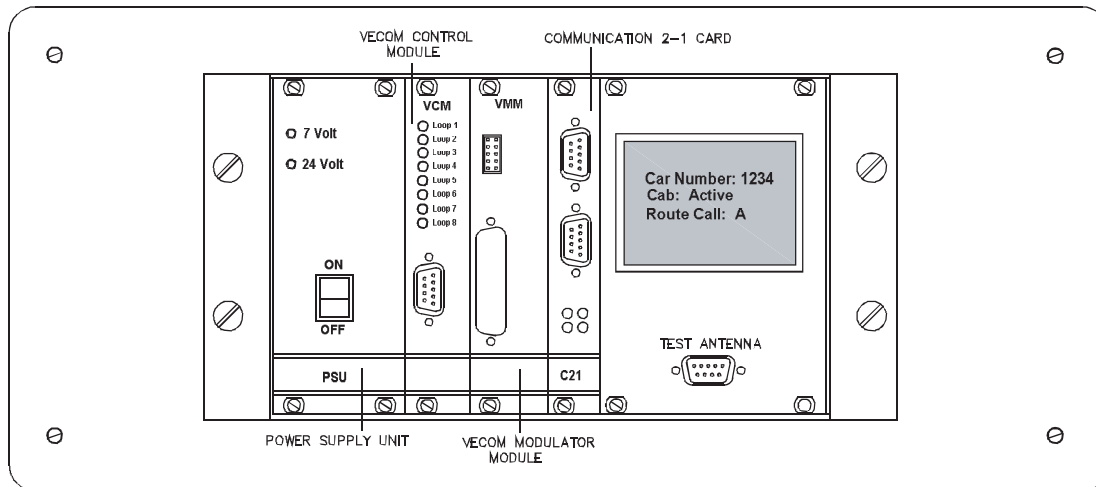
- Transmits an interrogation signal via the test antenna, then switches the test antenna to receiving
- Receives the data string from the vehicle transponder under test
- Processes the received data string
- Converts the received data string for reviewing on the 4-inch TFT color display

### TFT Color Display

Located on the front panel of the Portable Vehicle Test System is an integrated 4-inch TFT color display. This display is capable of displaying up to 4 lines of text, graphical indicators and/or other graphic data. The layout of the data is customized to the user's requirements.

### PVTS Test Setup

- Open the top cover of the PVTS housing
- Remove the test antenna from the unit
- Locate the test antenna in the proximity of the VECOM vehicle transponder under test
- Connect the Sub-D connector of the test antenna to the Sub-D socket on the front panel of the PVTS
- Power on the PVTS
- Test the VECOM vehicle equipment by selecting functions on the Cab Man Machine Unit (MMU) and verify the received data shown on the color display. Examples of the received data are: Train ID, Route Call "A" or Route Call "B" and Disabled Route Code and/or any other data



System Layout

## Specifications

VMM-Card	Loop Antenna Interface	1 Loop Antenna
VCM-Card	Serial Interface	1x RS232 for configuration/diagnostic purposes
Communication-2 Card	Serial Interfaces	2x RS232/RS485
	Parallel Interfaces	8x opto-coupler isolated outputs
	Optional Interfaces	Ethernet or GPRS
Display		Integrated 4-inch TFT color display with several fonts and graphic capabilities
Power Requirements	Power Consumption	110 VAC 50 mA
	Input Voltage	85 - 140 VAC, 47 - 63 Hz
Environment	Temperature	-13 ~ +158 °F (-25 ~ +70 °C), Operating
	Humidity	-95% @ 104 °F (+40 °C) (non condensing), Operating
	Vibration Resistance	1 Grms, IEC 60068-2-64, Random, 5 ~ 500 Hz, 1 Oct/min, 1 hr/axis, Operating
	Shock Resistance	20 G, IEC 60068-2-27, half sine, 11 ms, Operating
Physical Characteristics	Construction	polypropylene copolymer housing
	Mounting	N/A
	Dimensions (WxHxD)	10.87" x 13" x 16.87" (276 x 325 x 429mm)
	Weight	2.4 lb (1.08 kg)

## Ordering Information

Part Number	Description
6950 0000 5404	Portable Vehicle Test System (PVTS)