



Features

- New EMC approved enclosure
- Buy America compliant
- Integrated Loop Data Display Card
- Small Dimensions
- New Watertight Durable Housing

Benefits

- Compact in size
- Light weight

Introduction

The VETAG Portable Test Interrogator (VPTI) is a new generation of test equipment replacing our current Portable Test Interrogator. The major improvements are New EMC approved enclosure, Buy America Compliant, Integrated Loop Data Display Card, compact in size, lightweight, all components have front plates and all connectors are type Sub-D. The VPTI consists of a standard VETAG Interrogator section, Transmit/Receive Card, Loop Scan Timing Card, Shift Register/Buffer Card and Loop Data Display Card.

Basic Functionality

The basic functions of the VPTI are:

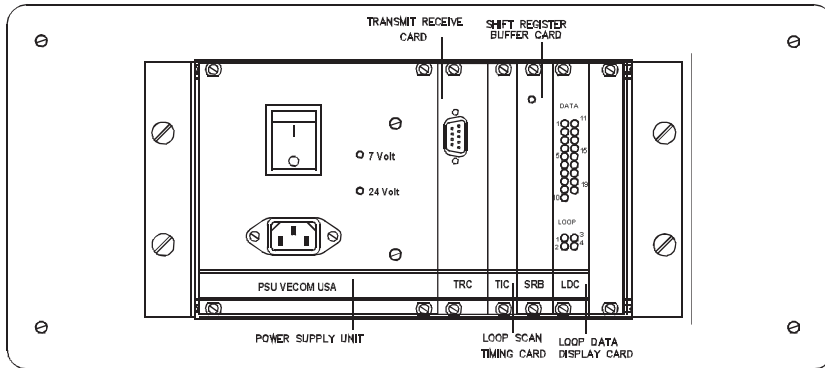
- Transmits a 100kHz signal, via the Loop Antenna, to interrogate any Transponder within range of the test Loop Antenna
- Receives data messages from the Transponder in range of the Loop Antenna
- Checks the received data messages for the presence of correct start and stop bits
- Performs the comparison between two successive data messages and validates only after they have been found identical
- Processes the received data messages and outputs them through the output buffer to the application boards

LED Indicators

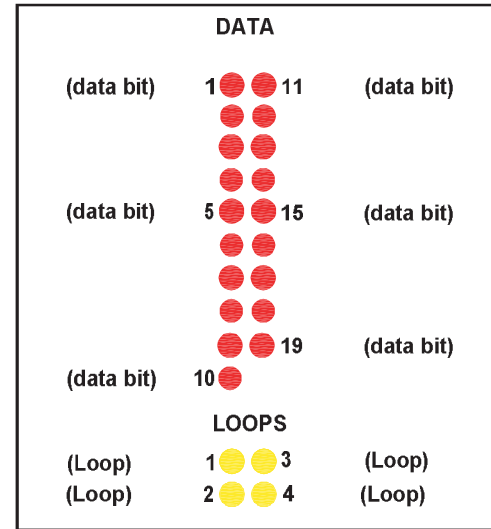
On the front panel of the Loop Data Display Card are 23 LED indicators. Nineteen indicators are used to display the 19 VETAG data bits, four indicators are used to display the active Loop Antenna input (for the VPTI only Loop Antenna input one is used). On the front panel of the Shift Register/Buffer Card is one indicator to display active VETAG Vehicle - Wayside communication. See details of the LED indicators on page 2 of this data sheet.

VPTI Test Setup

- Open the top cover of the VPTI housing
- Remove the test Loop Antenna from the unit
- Locate the Loop Antenna in the proximity of the VETAG Vehicle Transponder under test
- Connect the Sub-D connector of the test Loop Antenna to the Sub-D socket on the Transmit/Receive Card
- Power on the VPTI
- Test the VETAG vehicle equipment by selecting functions on the VETAG Code Control Box and compare the received 19 VETAG bits with the customer dependant VETAG Truth Table



System Layout



Loop Data Display Card LEDs

Specifications

Interrogation Frequency	100 kHz Xtal stabilized
Current to Loop Antenna	Adjustable 100 - 400 mA
Duration of Int. Pulse	2 ms
Repetition Frequency	41.25 Hz
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 5295	VETAG Portable Test Interrogator