



T-1200 Cable Test Van System

T-1200 Cable Test Van system provides the basis for the integration of different cable fault location techniques into a suitable vehicle, to meet the different testing requirements of customers for cables up to 32 kV.

The cable fault location function utilises a combined surge generator and fault locator, which can be used in conjunction with the T-506 Pin-pointer. Additional equipment for sheath fault location, route tracing and cable identification can also be included. The system can be used in conjunction with equipment from other manufacturers for functions such as very low frequency (VLF) measurements.

Overview

This datasheet covers the surge generator and cable fault locator equipment, which are integrated into a control console. This assembly includes the PC which provides the operator interface and also comprises the cables reel assemblies.

Additional functionality may be required to complete the fault location capability (e.g. fault pinpointer or sheath fault locator), but these are supplied as loose equipment and are covered in dedicated data sheets. Diagnostic equipment may also be incorporated but this will be sourced from third-party vendors.

Features

- Cable fault location functionality using the power of Kehui's product range of equipment
- Flexible modular system allows the inclusion of additional functionality
- Safety interlocking to help ensure secure operation
- Equipment available for fitting to a variety of vehicles
- 2500 J surge energy
- 400 MHz Sampling rate

Specifications

Equipment		Main functions and technical parameters	
Main insulation fault pre-location system for vehicle-mounted cables	High voltage surge generator	Output voltage	0-32 kV 0-16 kV, 0-8 kV, Adjustable negative DC
		DC Voltage	0-32 kV/50 mA negative polarity
		Impulse energy	2560 J; 32 kV/5 μ F, 16 kV/20 μ F, 8 kV/80 μ F
		Operating modes	DC withstand voltage, single pulse, periodic pulse
		Testing method	TDR/ SIM(MIM) / ICM
		Discharge period	6-30 s adjustable continuously when in Cyclic mode
	Fault locator	Measuring range:	20 m – 64 km
		Pulse voltage	60 V
		Pulse width	20 ns-10 μ s
		Sampling rate	400 MHz (2.5 ns)
		Resolution	$\pm$ 0.1 m
		Wave velocity:	90 m/ μ s – 300 m/ μ s continuously adjustable
	Computers and Printers	Industrial-grade flat-panel all-in-one machine, 15-inch colour LCD display Windows operating system. Portable colour printer	
	Cables	Integrated reel: 50 m, 50 kV high voltage output cable 50 m, 25 mm ² protective ground wire 30 m, measurement ground wire 50 m, external power cable	
	Safety Monitoring System	Door status detection: When the rear door of the vehicle is closed, the high voltage can be applied. If the door is opened, the high voltage will be automatically discharged to the ground.	
		High-voltage output state detection: When the high-voltage line is not inserted into the high-voltage port, or is in poor contact, the output is disabled.	
		Grounding state detection: Detects the status of the protective grounding wire. When the grounding is poor, the high voltage disabled, or automatically cut off.	
		Emergency stop button: In an emergency, pressing the emergency stop button will immediately terminate the high voltage output and discharge the device to ground.	
	Control Console	The traveling wave method distance measuring unit, high voltage output unit, computer and liquid crystal display and other equipment are installed in the workbench.	

