



TrapMan®

MODEL TM5/TrapManager®

COMPUTERIZED STEAM TRAP MANAGEMENT SYSTEM FOR PRODUCTIVE MAINTENANCE

Benefits

Complete measurement and analysis system for effective management of the steam trap population. **TrapMan** consists of two main components:

- **TM5** hardware, a precise ultrasonic and temperature testing instrument which stores and accesses **TLV** diagnosis technology for making consistent performance judgments.
 - **TrapManager** software, a comprehensive Windows based program designed to enable extensive data analysis of the entire trap population.
1. **TM5** makes the judgment, not the test personnel. Judgments occur by comparing the test results with stored data from **TLV**'s laboratory analysis of similar traps in a controlled environment. This comparison of the measured data to the reference data allows the instrument to be used by personnel with little trap testing experience or training.
 2. Trap performance is diagnosed within 15 seconds to facilitate a high daily testing rate.
 3. The **TM5** unit measures and indicates both the test judgment and surface temperature for operator use. This data is stored and can easily be uploaded to a computer via cable transfer.
 4. For rapid circuit testing, **TM5** can store data of approximately 1600 traps. Most frequently referenced models can be input and quickly recalled from the instrument's memory.
 5. Diagnostic data for each steam trap can be classified, summarized, and automatically analyzed for effective report and work order generation.
 6. **TrapMan**'s judgement accuracy has been validated by Lloyd's Register.



Specifications (Diagnosis Hardware)

Model	TM5	TM5-EX
Description	Standard	Intrinsically safe cUL: E113032; Cl. I, Gr. A, B, C and D, Div.1, T3C or ATEX: C E0081 Ⓢ II2G EEx ib II B T3 at 104°F amb.
Measurement Period	15 seconds (Time period required to hold the probe against the trap)	
Automatic Judgement	Good/Leak (Small, Medium, Large) /Blowing/Blocked/Low Temperature/Temperature Adjustment Failure	
Manual Judgement	Not in S (not in service), L/Gasket (gasket leak), L/Body (body leak), NO CHECK (not inspected)	
Memory	Total available registered trap models: 2960 when shipped, (3600 possible). Call registered models: max. 30 models per trap type No. of steam traps that can be tested and survey data memorized at one time: approximately 1600 Information items: 20. Model/Judgement/Temperature/Pressure/Inspection Data/Application/Installation Data/Connection, etc.	
Display	16 digits×2 lines, 5×7 Matrix LCD	
Steam Pressure Range	7—999.9 psig	
Steam Trap Surface Temperature	32—662 °F	
Operating Temperature	32—104 °F	
Humidity Range	20—80% RH	
External Interface	RS232C (Maximum communication speed: 19200 bps) (Adapter for USB provided)	
Power	* Main Battery: Ni-Cd 650 mAh. Backup Battery: Lithium 850 mAh (holds data for approx. 10 yrs.) Charger: Rapid 1 hr. charge (Special charger with protection against overcharge) Continuous Operation: 10 hrs. (with back-light off), 7 hrs. (with back-light on) Auto Power OFF: Auto Power Off function if no operation for more than 5 minutes (defaults to enable, can set to disabled) Resume: Yes (indicates trap No. when power went off). Battery Recondition: Yes (do it before recharging)	

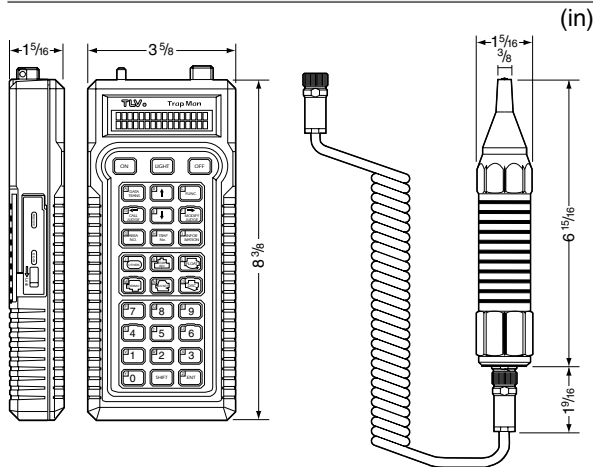
* **TM5** batteries are recyclable. Dispose of them in an environmentally friendly manner and according to local regulations. (For **TM5-EX** do not attempt to remove batteries. Return unit to TLV for battery replacement).

Specifications (Analysis Software)

Model		TrapManager	
Main Features	Management Log	Can display and maintain: All Trap List/Failed Trap Reminder List/Inspection History List	
	Trap Route	Survey route can easily be set and saved	
	Analysis	Can analyze and save the data by selecting various conditions in detail	
	Report	Can print: Log Details/Inspection History/Failed Trap Reminder List/ Trap Route/Set up conditions, etc.	
Communication		Automatic data transfer	
PC Requirements	OS	Windows 98, Windows NT 4.0 (Service Pack 6), Windows 2000, Windows XP	
	CPU*	Minimum	Intel Pentium 133
		Recommended	Intel Pentium 500
	Hard Disk		60 MB
	Memory (RAM)		64 MB Minimum, more memory generally improves performance
	CD-ROM Drive		2× (double speed) minimum
	Display	Minimum	SVGA (800×600) with 256 colors
Optimum		XGA (1024×768) with 16 bit color	

* **TrapManager** has been designed to work with Intel processors.
Windows is a trademark of Microsoft Corporation, Pentium is a Trademark of Intel Corporation.

Dimensions



Weight approx. 1.1 lb

Weight approx. 0.8 lb

Package

TM5/TM5-EX

- Main Units: Main Body, Coil Cord, Probe
- Accessories: Special Electrical Charger, Protective Case, Belt-loop Holder, Strap, Flat File, Carrying Case, Ear Phone (**TM5** only), Communications Cable, Serial/USB Adapter
- Manual: Pocket Guide

TrapManager

- Software: (CD-ROM)
- Accessories: Hardlock Key (HASP: LPT standard, USB optional)
- Manual: Quick Start Guide (pdf file on CD-ROM)



1. Use ONLY the battery charger included in the package when the unit is charged.
2. The interface cable and HASP included in the package must be used when the unit is connected to the PC.

Sample Screen of TrapManager

① Analysis



② Report



③ Maintenance



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Manufacturer
TLV CO., LTD.
Kakogawa, Japan
is approved by LRQA Ltd. to ISO 9001/14001

ISO 9001/ISO 14001

