



# TrapMan®

## MODEL TM5/TrapManager®

### COMPUTERIZED STEAM TRAP MANAGEMENT SYSTEM FOR PRODUCTIVE MAINTENANCE

#### Features

**Measurement and analysis system consisting of:**

- **TM5** hardware — a precision ultrasonic and temperature testing instrument in which the **TLV** diagnostic technology is stored.
- **TrapManager** software — a comprehensive Windows based program used for the input of data and analysis of results.
  1. **TM5** instrument combines three instruments in one probe: ultrasonic and temperature measurement plus data logging function.
  2. **TM5** tests a steam trap by comparing its operation to data from laboratory tests of an identical trap held in its memory.
  3. The **TM5** judgement is automatic and repeatable.
  4. Data from **TM5** is easily uploaded to the **TrapManager** software.
  5. **TrapManager** summarizes and analyzes the results, making the data available in a variety of reports, tables and graphs.
  6. **TrapMan's** judgement accuracy has been validated by Lloyd's Register.



#### Specifications (Diagnosis Hardware)

Model	TM5	TM5-EX*
Description	Standard	Intrinsically safe ATEX: C 0081 IIB T3 at 40 °C amb. cULus: Class I, Groups C and D, Temp. code T3C
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 Number 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	0.05 — 8.0 MPaG (0.5 — 80 kg/cm <sup>2</sup> G)	
Steam Trap Surface Temperature	0 — 350°C	
Operating Temperature	0 — 40°C	
Humidity Range	20 — 80% RH	
External Interface	RS232C (Maximum communication speed: 19,200 bps) (Adapter for USB provided)	
Power	Main Battery**: Ni-MH 860 mAh ( <b>TM5</b> , <b>TM5-EX</b> cULus), Ni-Cd 650 mAh ( <b>TM5-EX</b> ATEX) Backup Battery**: Lithium 850 mAh (holds data for approx. 10 years.) Charger: Rapid 1 hour charge (special charger with protection against overcharge) Continuous Operation: 10 hours (with back-light off), 7 hours (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)	

\* The **TM5-EX** is approved for use in hazardous locations only while inserted in the leather case. Do not remove the case while in a hazardous location. Product markings are provided on the product enclosure beneath the leather case. For hazardous areas, the **TM5-EX** should be used by trained personnel with knowledge of the hazardous locations/classifications.

\*\* **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).

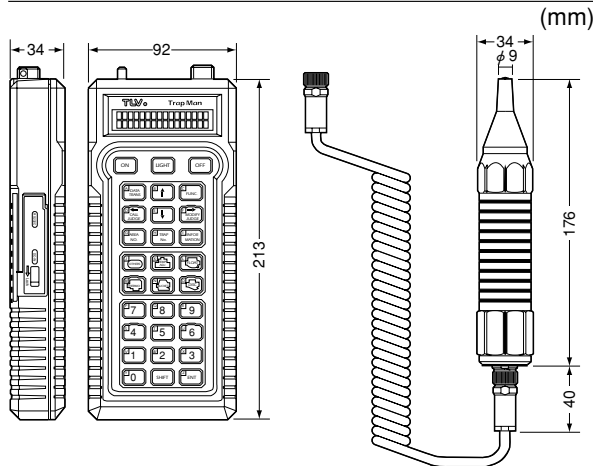
Specifications (Analysis Software)

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.	
PC Requirements	Communication	Automatic data transfer	
	OS	Windows 98, Windows NT4.0 (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	
	CD-ROM Drive	2× (double speed) minimum	
	Display	Minimum	SVGA (800×600) with 256 colors
		Recommended	XGA (1024×768) with 16 bit color

Windows is a trademark of Microsoft Corporation, Pentium is a Trademark of Intel Corporation.

\* TrapManager has been designed to work with Intel processors.

Dimensions



Weight approx. 500 g

Weight approx. 350 g

Product Components

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: USB standard, LPT option)
- 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



Manufacturer

**TLV** CO., LTD.  
Kakogawa, Japan

is approved by LRQA Ltd. to ISO 9001/14001

ISO 9001/ISO 14001

