



# Mangal Instrumentation

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## HAND-HELD BREATH ALCOHOL ANALYZER MODEL-KT4000P



### KT -4000P Hand-held Breath Alcohol Analyzer

KT-4000P offers professional users precise and quick breath alcohol analysis in a user-friendly and compact form. Thanks to its wide range of possible configurations, the hand-held instrument can be easily adapted to meet different international regulations and guidelines. Because KT-4000 offers intuitive operation, it's easy to use and precise measurement results can be obtained within a very short period of time.

**1. Electrochemical/Fuel cell sensor**

Highly specificity to alcohol, unaffected by other possible breath contaminants

**2. Compact gas circuit design and advanced analysis process**

Assure fast, accurate and stable testing results

**3. Quick and precise analysis**

This ensures a high specificity to alcohol, with a long and stable working life

**4. Built-in printer** Can be detached from main body and be replaced by a piece of spare lithium-ion cell

**5. Fast printing process** 5 cm per second

**6. Color LCD touch screen** High resolution

**7. Safe and easy to use**

All measurement functions are controlled via a single key, while menu navigation is by three menu keys

**8. Easy to read display** Alcohol readings are clearly shown on a 2.8 inch LCD screen.

**9. Touch screen** For easy input of information

**10. Memory capacity** Able to store 4000 test results This data can be downloaded to a printer or PC.

**11. Built-in GPS function** Can locate the position of testing site

**12. Power supply** Rechargeable lithium-ion cell Able to work for twenty hours

**13. Big capacity RTC-BATT** Can be replaced easily

**14. Mouthpiece** Specially designed one-way mouthpiece with non-return valve

# INTRODUCTION

## KT-4000

### 3 Technical Data

Details	Technical Data	
Principle of measurement	Electrochemical Sensor, alcohol-specific	
Measurement Range (BrAC)	0.000mg/L □ 1.500mg/L	
Resolution	0.0001 mg/L	
Accuracy: Max. Measuring error, in relation to the ethanol standard	Ethanol Vapor Concentration C /(mg/L)	Deviation
	C<0.400	±0.020mg/L
	0.400≤C<1.000	±5%
	C≥1.000	±20%
Repeatability of Indicating Value	Ethanol Vapor Concentration C /(mg/L)	Deviation
	C<0.400	0.007mg/L
	0.400≤C<1.000	1.75%
	C≥1.000	6%
Calibration	Every 6 months	
Temperature range-operation	-5 □ □ 45 □	
Temperature range-storage	-30 □ □ 70 □	
Optimum Storage Conditions	Temperature □ 20 □ ± 5 □ □ Humidity □ < 80% RH □ Pressure □ 86kPa □ 106kPa No vapor or electromagnetic disturbances in the environment are influencing the normal working conditions of the device	
Blowing Time	3 seconds □ breath flow □ ≥ 20L/min □	
Warm-up Time	6 seconds after switching on	
Recovery Time	1-5 minutes, depends on Ethanol Vapor Concentration	
Analysis Time	Less than 10 seconds	
Display	2.8 inch color touch screen	
Memory Capacity	Stores 4000 measured values with date and time □ data can be transferred to a PC or printer □	
Communication Method for Printer	Bluetooth	
Printer	Micro Thermal printer	
Dimensions(L x W x H)	Approx. 190mm×82mm×36mm	
Number of Measurements per Battery Pack	More than 500 times □ under ambient conditions □	
Operation Voltage	State of charging	State of operation
	DC10~14V	DC 6.3~8.4V
Batteries	2000mAh/7.4V Lithium-ion-battery	
Weight	Approx. 470g □ including printer, batteries, paper roll □	

Note: The device performs best under benchmark working condition. It is able to work between temperature - 5 □ and 50 □ with ambient humidity from 20%RH to 90%RH.