

# TD-4239

## BLOOD GLUCOSE MONITORING SYSTEM



5 Sec, 1.0  $\mu$ L

Strip-Ejection



Data Port



### FEATURES

- Work for dogs or cats
- HCT Range: 0 ~ 70%
- RS232 Data transmission
- 4 daily alarms



### 2 + 2 Bio - Signal Technology

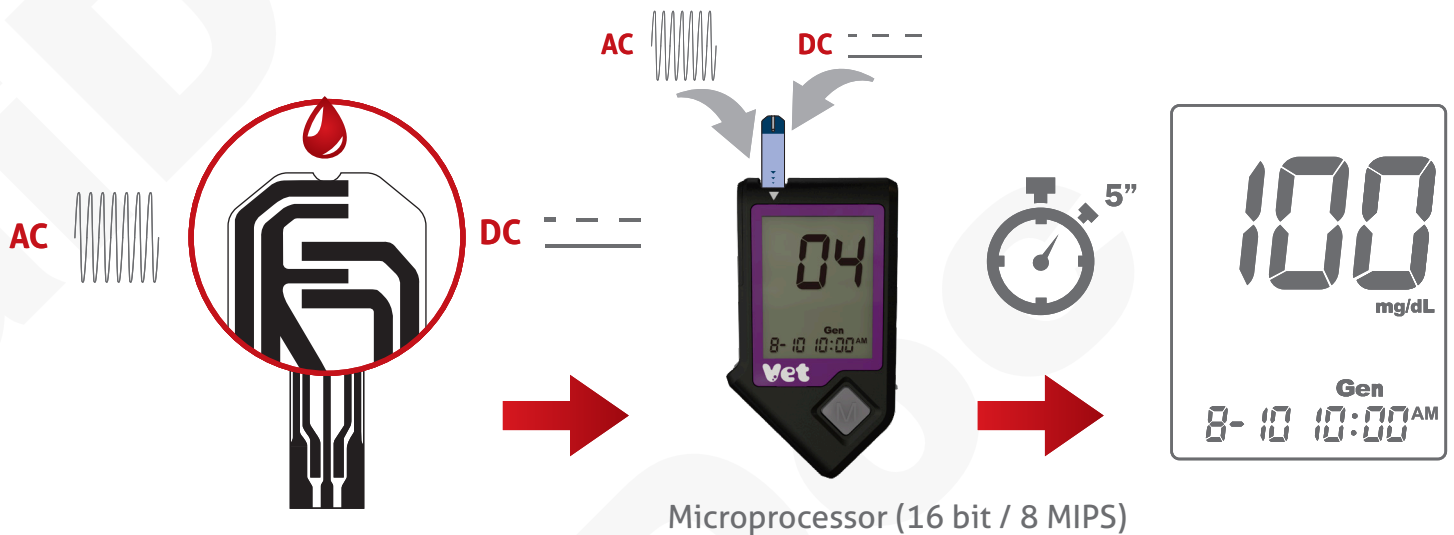
TaiDoc patented 2 + 2 (HCT Interference Compensation; 2 enzymes plus 2 signals) technology uses two different wales on the strips to detect HCT value by AC signal and glucose value by DC signal.



**A specific calibration code chip for dogs and cats**

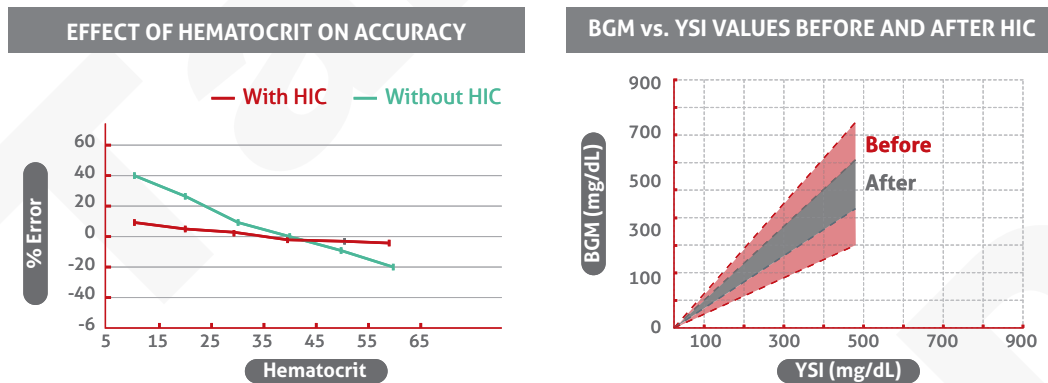
# VET Glucose Monitoring System

## Feature



## The Result

Simultaneous measurement of patient's hematocrit with algorithmic adjustment of glucose result.



## What will Taidoc VET Benefit You

VET PBGMs can provide the most accurate results for your pets.

- A specific calibration code chip for dogs and cats
- 2+2 Bio-Signal Technology will correct the blood glucose level according to the different hematocrit range and the precise hematocrit value from blood samples taken from dogs and cats.

	Dog	Cat
HCT Range	43.3 - 59.3%	29.3 - 49.8%

Reference:

• <http://www.veterinarypartner.com/Content.plx?A=2595>

THE PET HEALTH LIBRARY, By Wendy C. Brooks, DVM, DipABVP Educational Director, VeterinaryPartner.com





# Why Do You Need - VET Glucose Meter

When we test pets' blood glucose level on human portable blood glucose meters, the reading results will always be significantly lower than it should have, especially for dogs and cats.

The reason is that animals have a different blood glucose composition from human beings. For example, the blood glucose concentration in plasma blood for dogs and cats is much higher than human beings.

In addition to that, Hematocrit level is another influential factor affecting glucose level measurement, since the percentage of Hematocrit for dogs and cats is different to each other and to human respectively.

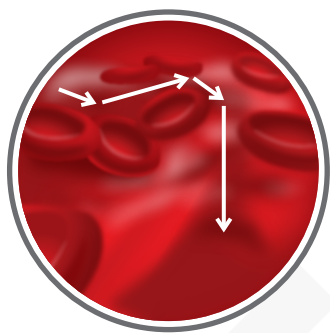
Human portable blood glucose meters are designed according to human blood composition, so if we use human blood glucose meters for pets, the meter will calculate the glucose level based on human blood composition, which will lead to underestimated results. Therefore, TaiDoc Vet Portable Blood Glucose Meters would be a better option for your pets.

Glucose Percentage			
			
plasma	87.5%	93%	58%

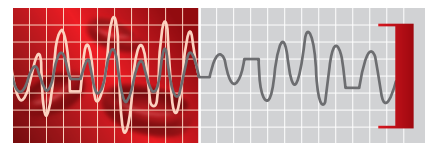
Reference:

- THE DISTRIBUTION OF GLUCOSE IN HUMAN BLOOD, Eaton M. MacKay J. Biol. Chem. 1932, 97:685-689.
- Feline Diabetes, An Issue of Veterinary Clinics: Small Animal Practice. Jzacquie Rand

## What is HCT?



Hematocrit (HCT) is the percentage of the red blood cells in the blood. The higher HCT level will have lower blood glucose result, and the lower HCT level will have higher blood glucose result.



Hematocrit (HCT) level varies between human and pets. normal HCT level for

Human	Dogs	Cats
38% - 54%	43.3% - 59.3%	29.3% - 49.8%

Plasma  Red Blood Cells  Glucose

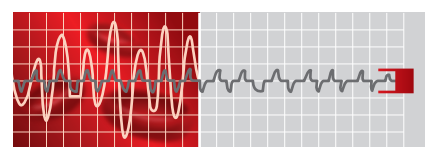
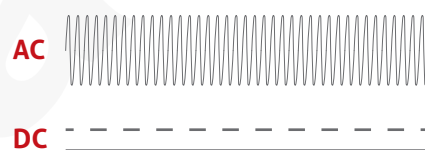


\*Example of Hematocrit Presence with Glucose Distribution in Plasma and Red Blood Cell

## Benefits of the 2 + 2 Technology



- TaiDoc patented 2 + 2 (HCT Interference Compensation; 2 enzymes plus 2 signals) technology uses two different wales on the strips to detect HCT value by AC signal and glucose value by DC signal.
- Utilizing AC signal is used to calculate the hematocrit value in order to compensate the correct value for fast, small volume, accurate test.
- Utilizing DC signal is to calculate the glucose value.





## SPECIFICATIONS

Enzyme Type	GDH-FAD
Sample Size	1.0 $\mu$ L
Reaction Time	5 seconds
Measurement Range	10 ~ 600mg/dL (0.55 ~ 33.3mmol/L)
Hematocrit Range	0-70 %
Precision	SD < 5mg/dL (0.278mmol/L) at < 100mg/dL (5.55mmol/L); CV < 5% at 100mg/dL (5.55 mmol/L)
Accuracy	$\pm 15$ mg/dL if $\leq 100$ mg/dL; $\pm 15\%$ if >100mg/dL
Communication	RS232
Power Source	CR2032 x1
Memory Capacity	400 sets
Day Average	7, 14, 21, 28, 60, 90 days
Daily Alarm	4 daily alarms
Dimension	96 (L) x 49.0 (W) x 14.0 (H) mm
Weight	42 g (without battery)
Operating Condition	+10°C (50°F) ~ +40°C (104°F), below 85 % R.H.
Storage Condition	-20°C (-4°F) ~ +60°C (140°F) (Meter); 2°C(35.6°F) ~ 30°C(86.0°F) (Strip)
Units Per Carton	30
Carton Size	476 (L) x 370 (W) x 400 (H) mm
Gross Weight Per Carton	10.5 kg



www.taidoc.com

**TaiDoc Technology Corp.**

B1-7F., No.127, Wugong 2nd Rd., Wugu Dist.,  
New Taipei City 24888, Taiwan  
Tel : +886-2-6625-8188 Fax : +886-2-6625-0288