

FREESENS: Advanced Strip Chemistry

Advanced Enzyme



Higher accuracy by using GDH-FAD enzyme and a specific mediator

Clinical Implication :

- Accurate results in patients with respiratory diseases or under oxygen therapy.
- Accurate results with both venous and capillary whole blood samples.
- After opening, test strips can be used up to 6 months.
- 2-year shelf-life

Minimum Interference



High substrate specificity with no interference from 61 substances

Clinical Implication :

- Covers majority of endogenous and exogenous substance including uric acid, acetaminophen, salicylates, ascorbic acid, maltose, galactose and commonly prescribed DM and HTN medications.
- Accurate readings in patients with kidney failure, heart failure, HTN and inherited metabolic disorders like galactosemia.

		FREESENS	Glucocard 01
Accuracy ISO 15197:2015	BS<100 Within±15mg/dl	100%	100%
	BS≥100 Within±15%	99.3%	96.5%
Coding Technology		No Coding	Auto Coding
Test Time		5 Seconds	7 Seconds
Hematocrit Range		10-65%	35-50%
Enzyme		GDH-FAD	GOD
Memory Capacity		880	50
Color Indicator		+	-
Pre/Post Meal Indicator		+	+
Connectivity		+(NFC)	-
Sample Volume - (µL)		0.6	0.3

References

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FREE SENS®

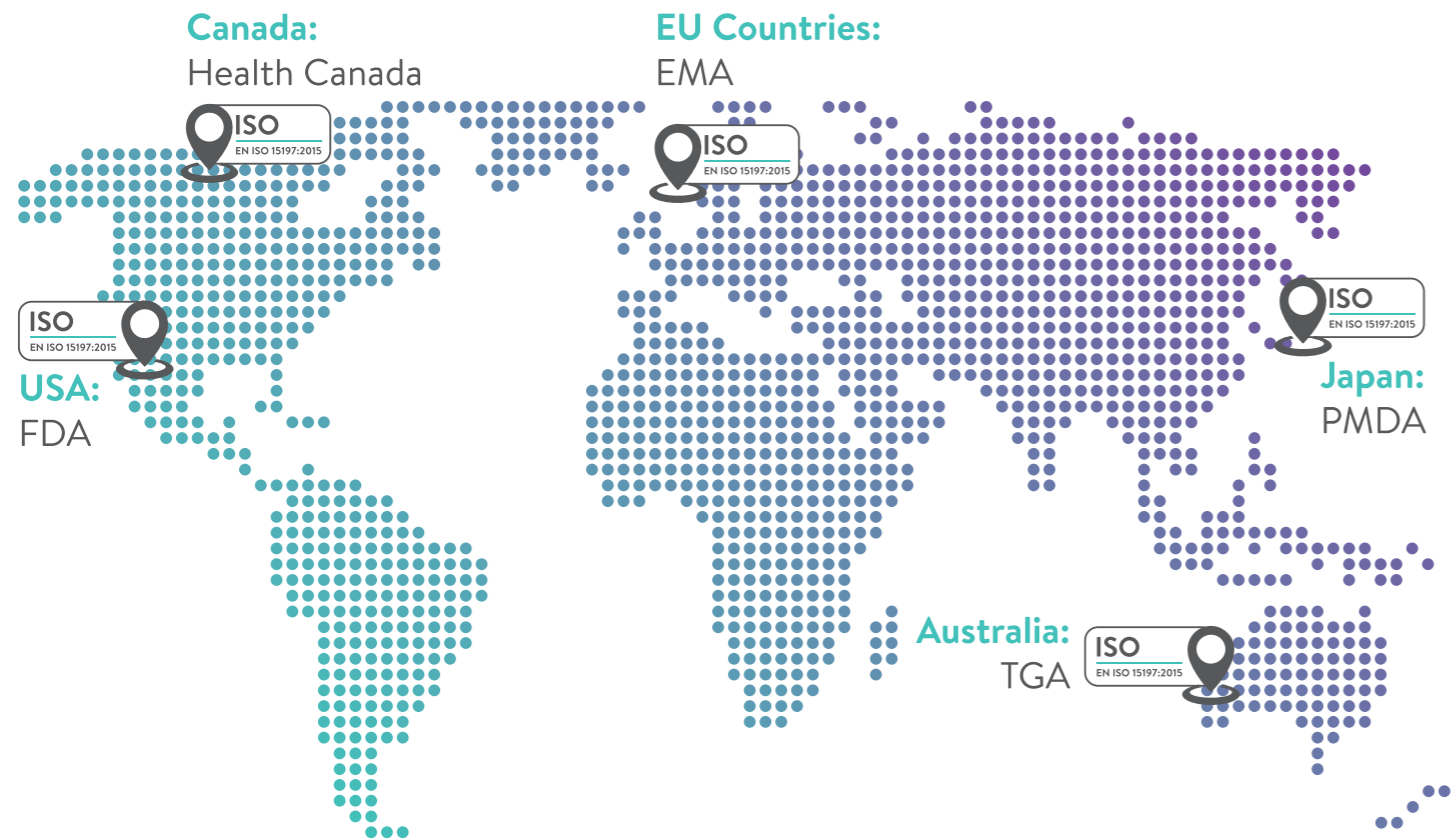
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Guidelines for Approval of Glucose Monitoring Devices



FREESENS: Cutting Edge BGM Technology

Hematocrit Correction

Applying AC voltage to the blood sample and processing the electric response signal, the system can calculate HCT and compensate the inaccuracies related to HCT variation.

Clinical Implication:

- Wide hematocrit range coverage: 10-65%
- Accurate readings in specific populations including smokers, pregnant women and neonates.

No Coding Technology

High quality enzyme purification and precise enzyme dispensing

Clinical Implication:

- Ease of use
- Improved accuracy due to reduction in lot-to-lot variability
- Eliminating miscoding errors

Temperature Correction

Using both built-in temperature sensor and multi sensor predictive algorithm to compensate for temperature variability.

Clinical Implication:

- Accurate readings when temperature changes within the working range
- Report error codes "Ht" or "Lt" when the ambient temperature is out of the working range.



Dual Under Filling Detection

Using both the extra electrode and insufficient sample detection algorithm to ensure the elimination of all under filling related inaccuracies.

Clinical Implication:

- Accurate results in patients prone to insufficient blood sampling, such as uneducated patients, children and those with hand tremor
- Report error code "E-2" in case of insufficient blood sample volume.

FREESENS: Highly Accurate Results

BS Range	ISO 15197:2015			FDA OTC 2020	
	BS < 100	BS ≥ 100	CEG	Entire range	
Bias	±15 mg/dL	±15%	Zone A+B	±15%	±20%
Minimum Accuracy	95%	95%	99%	95%	99%
FREESENS/Easymax	100%	99.3%	100%	96.6%	99.6%