MEDICAL INSTRUMENTS · MODEL PM-VF-100

Ravaye™ E2 Vein Finder

Light, bringing clarity to care.

Advanced near-infrared vein visualization, projected in real time onto the patient's skin — supporting procedural confidence and patient comfort.



CLASS I MEDICAL DEVICE · ISO 13485 · ISO 9001 · ISO 14001 · ISO 45001 · CE (LVD) · CDSCO CLASS A

Technology overview

Ravaye™ E2 enhances the visibility of superficial veins using near-infrared illumination (760–940 nm), mapped and projected in real time onto the skin — non-invasively and without contact.

Lightweight, intuitive and portable, it needs minimal training and fits existing clinical workflows — from hospital wards to day-care units, infusion suites and community clinics.

How it works

1. **Illuminate**
   Near-infrared light is directed at the skin; hemoglobin in superficial veins absorbs it differently from surrounding tissue.
2. **Map**
   The device detects this optical contrast and builds a real-time map of the superficial vein structure.
3. **Project**
   The map is projected onto the skin by DLP projection — contact-free — giving clear, live guidance.
4. **Adapt**
   12 projection colors, 3 sizes, 6 brightness levels and 9 display modes let the clinician tune the image.

Why clinicians choose Ravaye™ E2

Wide range of patients
Pediatric, geriatric, oncology, bariatric and difficult-access patients, subject to individual limitations.

Bedside ready
450 g handheld unit, approx. 3.5-hour battery — ward, clinic and emergency ready.

Patient comfort
Non-invasive and contact-free, with no consumables.

Made in India
Manufactured by Polymatech at Oragadam, Tamil Nadu, under ISO 13485.

Clinical applications

IV cannulation
Supports confident line placement across general, acute and infusion settings.

Phlebotomy and blood draw
Supports routine and high-volume blood collection.

Pediatric and neonatal care
Gentle, contact-free visualization for small, delicate veins.

Geriatric care
Clear guidance for fragile or mobile veins in elderly patients.

Oncology and infusion therapy
Support for patients whose venous access is affected by repeated treatment.

Emergency care
Portable and ready in seconds — at the bedside or in the emergency department.

Technical specifications

Detection method	Near-infrared illumination, 760–940 nm
Detection depth	0–10 mm (superficial vasculature)
Optimal working distance	20–26 cm
Position / resolution accuracy	±0.3 mm
Projection technology	DLP projection onto skin
Projection colors	12 selectable
Projection sizes	3 — large, medium, small
Brightness / inverse mode	6 levels · inverse selectable

Display modes	9 — default, enhance, hair-removal, guide-line, 5 color-mix
Battery	Rechargeable lithium-ion, 4,900 mAh
Operating duration	Approx. 3.5 hours
Charging / adapter	USB-C · 5 V, 4.5 A · input 100–240 V AC, 50/60 Hz
Working noise	≤ 35 dB
Weight	450 g
Dimensions (L × W × H)	24 × 6 × 6.5 cm
Ships with	Carrying case, adapter, cable, calibration card

Regulatory, quality and warranty

Certifications	ISO 13485:2016 · ISO 9001:2015 · ISO 14001:2015 · ISO 45001:2018
India	CDSCO Class A medical-device registration
European Union	CE marking under the Low Voltage Directive 2014/35/EU
United States	FDA Registered Establishment and Device Listed, Class I, 510(k)-Exempt
Classification	Class I medical device
Manufacturer	Polymatech Electronics Limited, Plot No. OZ-13, SIPCOT Hi-Tech SEZ, Oragadam, Sriperumbudur Village, Kanchipuram District, Tamil Nadu 602 105, India
Warranty	1 year standard; 2 years when registered within 7 calendar days of purchase at www.nisene.com/register-product (products used in the United States). Claims: service@nisene.com

Enquiries

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Ravaye™ E2 assists qualified healthcare professionals in visualizing certain superficial veins. It is not a diagnostic device and does not replace clinical judgment, standard venipuncture practice, palpation or confirmation of vessel suitability. Successful venous access is not guaranteed; the projected image is an aid only. Specifications are subject to change without notice.