

UNIQUE ROBOTIC TCD TECHNOLOGY TO ASSIST PHYSICIAN FOR CEREBRAL BLOOD FLOW VELOCITIES LONG-TERM MONITORING

About Delica

Shenzhen Delica Medical Equipment Co., Ltd. was established in 1998. Delica has independent intellectual property rights and it has 15 authorized invention patents at present. Delica is always focusing on neurology medical equipment product research and development, production, marketing and sales, especially in Transcranial Doppler (TCD), Multi-functional Vascular Ultrasound System (MVU), and Digital Electroencephalogram etc.

After 20 years, Delica's products are becoming more and more extensive in application of academic research, and the number of published academic articles which had used Delica equipments from domestic and abroad are also increasing.

The company's Transcranial Doppler (TCD) series products reach the international leading level with CE and FDA certification; a large number of products were sold to the tertiary referral hospitals and were exported to Europe and the United States. Nearly 10,000 domestic users in China, and the international market share is in the top two. The market share among the best in 2016 which included China, the United States, South Korea, the Netherlands, Hong Kong and other countries and regions.



EMS-9D

Technical Specification:

Dimension(L×W×H)	360mm×155mm×345mm
Weight	6.50 ±0.3Kg
Probe Connections	1.6/2MHZ PW probe,4/8MHZ CW probe, 16MHZ PW probe
Hard disk	500GB or higher
Operating System	MS Wes 7/Win 10
USB connection	USB2.0, USB3.0
Bilateral monitoring	2 channel
Power M-mode display	128 depths, 8000 gates
EDS Embolic detection	YES
DICOM interface	YES
Robotic monitoring	Unique robotic probe
ICM+ module	Cooperated with Cambridge university
CO2/VMR module	YES
Digital output channels	8 channel
Multi-depth display	up to 8 depths



Application Field

- **Routine diagnosis application:**

Regularly diagnosis for the status of cerebral arteries, auto-regulation, cerebral pressure and brain death. Detection and monitoring of vasospasm, Emboli detection and monitoring of embolic events, Diagnosis of intracranial stenosis and occlusion, Evaluation and monitoring of intracranial blood flow during surgical procedures.

- **Monitoring application:**

Cerebral blood status monitoring, Embolus detection, PFO test and IOM in neurosurgery. Vascular interventional procedures: monitoring during carotid stent placement or resting balloon occlusion.

- **Other application:**

Combine with ICM+, providing multiple information helping doctors and researchers monitoring the status of patient.

Partner with Cambridge



Delica TCD + Cambridge ICM+, an innovative tool for neuromonitoring application.

Delica TCD: Clinical publication from Cambridge University

1. Application of robotic transcranial Doppler for extended duration recording in moderate, severe traumatic brain injury: first experiences. Zeiler and Smielewski Crit Ultrasound J (2018) 10:16
2. Optimal cerebral perfusion pressure via transcranial Doppler in TBI: application of robotic technology. Acta Neurochirurgica (2018) 160:2149–2157
3. Robotic Semi-Automated Transcranial Doppler Assessment of Cerebrovascular Autoregulation in Post-Concussion Syndrome: Methodological Considerations. Khan et al.; Neurotrauma Reports 2020, 1:1



Portable

All-in-one design that suits for different clinical uses.



Smart

Smart digital ultrasound technology



Touch screen

Touch screen operation, convenient and efficient.



ICM+ Compatibility

Collaborate with University of Cambridge which make ICM+ related data can be easily connected.



Intelligent

Various Intelligent & smart system, such as scene detection, Voice Prompt and guidance, and Experiment result division in PFO test.



Robotic probe

Innovative Robotic Control Program.

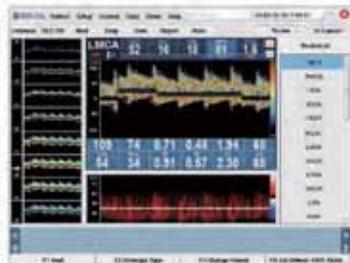


DELICA



Product Features

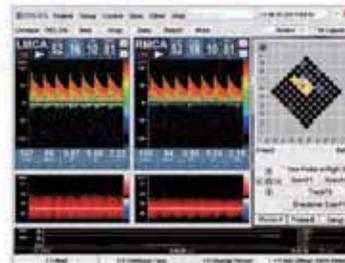
The base line would be adaptive adjustment according to the speed of blood flow.



Velocity Limited would be automatically switched and adjusted according to the speed of blood flow.



Innovative Robotic Probe Technology



8000 gates dynamic M-mode
Record and analysis all the original data on the M-mode. It helps physicians improve the workflow in clinical research, academic study etc.



Automatic grading system for PFO test result.



Real-time output the value of IWM, Peak and Power.



Advanced Emboli Detection software
Based on the cooperation with many neurologists working on emboli research, the emboli detection software has an improved algorithm; the accuracy and reliability of HITS detection are superior to other TCD instruments.



Data combination with ICM+, provides a clinical research software for simultaneous and real-time multimodality monitoring and analysis in neurological intensive care environments.

