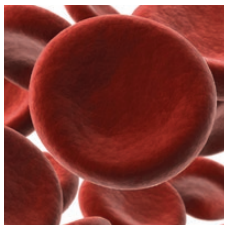
Aid post operative monitoring
with moorVMS-TREND









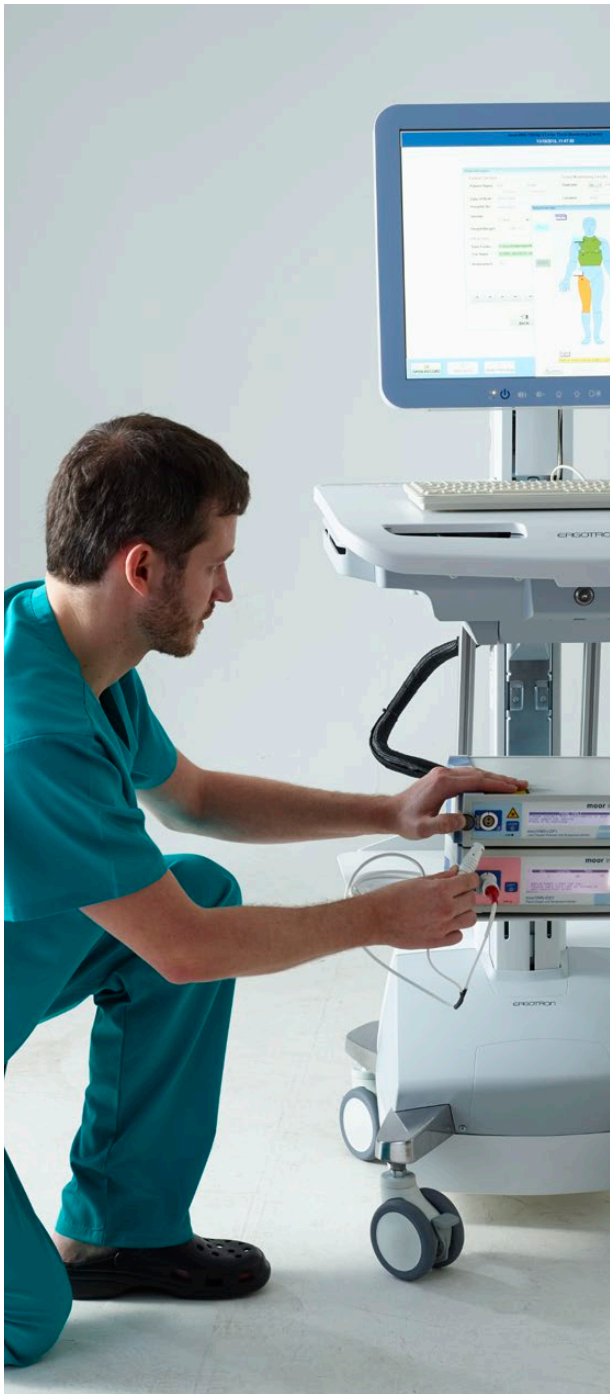
moor instruments
innovation in microvascular assessment

moorVMS-TREND – Assistance For Post Operative Monitoring

Free flaps, replants and transplants depend on tissue blood flow and oxygenation for survival and lasting health. These essential parameters are monitored by you with the moorVMS-TREND system, over the important minutes, hours and days post-op.

The moorVMS-TREND system enables accurate and sensitive measurements of microvascular blood flow, oxygenation and temperature to be made in the minutes, hours and days post surgery and can help to provide early warning of potential complications post surgery. Automation has been in-built. Baseline sampling, noise rejection, graphical trend display, alarm levels and alerts are all automated, leaving the system as easy to use as possible.

Central to the system is the moorVMS-TREND software package that will display traces from your preferred combination of blood flow, temperature and/or tissue oxygenation probes. Probes are available for surface, buried and oral flaps (tissue oxygenation and temperature probes are surface only). The large, clear graphical display shows smoother long term trending. In addition, “live” traces can be viewed to assess pulsatility and vasomotion status.
A mobile clinical cart is also available as an optional extra to provide convenient housing and mobility of monitors, PC interface and probes.



Questions and Answers

Q. What parameters can I monitor with moorVMS-TREND?

A. moorVMS-TREND enables you to connect your preferred combination of 1 or 2 LDF and 1 or 2 OXY channels. This enables you to monitor microvascular blood flow, tissue oxygenation and temperature. Using the combined skin probe, CP1T, all parameters are sampled with one probe head.

Q. What type of flaps can I monitor?

A. Probes are available for exposed surface flaps and replants (use VP1T, CP1T or OP1T), flaps covered by dressings (use VP-SPP), buried flaps (use side or end viewing endoscopic designs, VP6a or VP6ads) or oral flaps (use VP8c suturable titanium disc probe). Other probes can be used in other situations should the moorVMS-TREND protocol prove useful. Probes are re-usable and designed to withstand at least 5 sterilisation (Sterrad) cycles.

Q. What is the longest period of time the moorVMS-TREND can record data for?

A. The system is capable of continuous monitoring sessions of days.

Q. Is the system easy to use?

A. Yes, much of the software has been automated and the remainder is intuitive to make the package easy and instinctive to use. The system features easy to read numerical and trend/fast graph displays.

Q. How are the alarm levels set?

A. Alarm levels are set automatically by the monitor after 30 minutes of baseline assessment. A visual alarm shows whenever blood flow and/or tissue oxygenation drop below the alarm level and an audible alarm sounds if low flow and/or oxygenation are sustained for a pre-defined period. The alarm level is set as a chosen percentage or absolute of the measured baseline level. Manual override is available.

Q. How does the trace differ from a normal laser Doppler trace?

A. The trace is much smoother than a normal laser Doppler trace yet still sensitive to rapid changes. This is due to the use of a novel noise rejection protocol, making the traces far easier to view. Temporary live monitoring is also available to allow confirmation of pulsatility and vasomotion in the signal. Tissue oxygen and temperature monitoring are also available for additional information on tissue health.

Q. Can the trace be analysed and exported?

A. Yes. Report templates are available to simplify and automate the process. Data can also be easily exported for further processing in proprietary software packages. A patient database is included to organise and manage numerous monitoring sessions.



About Moor Instruments

Moor Instruments, established in 1987, is a world leader in the design, manufacture and distribution of monitoring and imaging systems for micro-vascular assessments. We are proud now to include tissue oxygenation assessments within this portfolio.

Firsthand experience of laser Doppler research and development within Moor dates back to 1978 and with this we have the breadth of knowledge to help with your application and the enthusiasm to try and find answers to any of your questions.

By giving priority to performance, quality and service, we strive to ensure the highest levels of customer satisfaction.

Our dedicated design team is involved with a number of development projects for other partners and manufacturers. Whatever your needs, as a researcher, clinician or manufacturer, Moor will work harder for you.



moorVMS-TREND with optional moorVMS-OXY, panel PC and MS3b mobile stand.

moorVMS-LDF Specifications:

Quality Control
Moor Instruments is certified to ISO 13485:2016.
The moorVMS-LDF is CE marked as a medical device.

Measurement Parameters
Flux (tissue perfusion).
DC (mean intensity).
Temperature (tissue temperature).

Measurement Channels
moorVMS-LDF1 Single channel.
moorVMS-LDF2 Dual channel.

For full product details, please refer to the moorVMS-LDF brochure.

moorVMS-OXY Specifications:

Quality Control
Moor Instruments is certified to ISO 13485:2016.
The moorVMS-OXY is CE marked as a medical device.

Measurement Parameters
SO_2 (tissue oxygen saturation)
totalHb (relative total haemoglobin concentration)
Temperature (tissue temperature)

Measurement Channels
moorVMS-OXY Single channel.

For full product details, please refer to the moorVMS-OXY brochure.

moorVMS-TREND Software:

The moorVMS-TREND PC Software is the key component of the moorVMS-TREND package and can be operated on any modern PC, including laptops and medical grade touchscreen options available from Moor.

Intended Use

moorVMS-TREND PC software is intended for use with moorVMS-LDF and moorVMS-OXY, for long term blood flow and tissue oxygen trend monitoring. It is intended for a variety of physiological and clinical research applications in clinical settings. The clinical value of measurements in disease states has not been established. The moorVMS-TREND is not intended to be used as the sole basis for diagnosis or therapy. The moorVMS-TREND Software is not intended for critical care monitoring where loss of function could result in harm to the patient.

Parameters

moorVMS-TREND will automatically detect connected monitors and add to the monitoring profile. Parameters assessed include tissue blood flow, oxygenation and temperature.

Visual output

Trends can be assessed visually with clear TREND and real time graphs as well as large numerical updates.

Alarm setting

The software will make an automatic baseline assessment and apply pre determined alarms based on your choice of sensitive or conservative alarms.

Data Management

Data can be saved and found again easily thanks to the in-built patient database and onward reporting or data export is easily managed.

Please contact us for a demo version to evaluate the features and benefits.

Moor Instruments reserves the right to change specifications without notice.

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