



# Hemo MIX 3

POWERFUL - VERSATILE - INTUITIVE



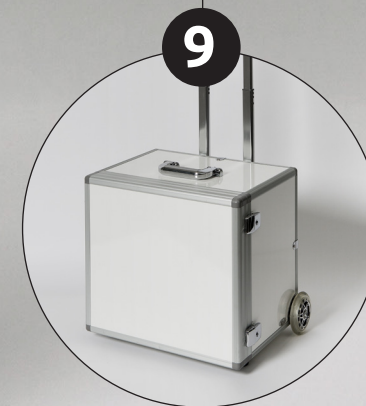
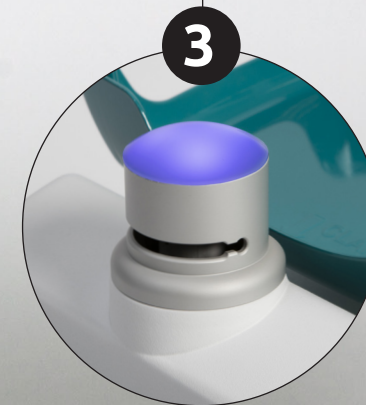
**DELCON**

*Our technology Your health*

# KEY FEATURES

*HemoMix3 is a modern blood collection monitor, carefully designed to speed up the donation process - a super easy solution to handle donations in a safe and efficient way.*

- 1. Intuitive Icon-Based User Interface and Diagnostics** - a fully redesigned user-experience
- 2. Safety Clamp and Tube Detectors** - to control if the tube is well inserted into the clamp and to check the clamp position
- 3. Multicolor Indicator Light** - 360° visible, even at long distances; easy to understand
- 4. Audio and Visual Alerts** - with 3 volume levels, muting, and self-reset
- 5. Predictive Local Intelligence** - warning in case of slow collections
- 6. Target Volume Editable During Collections** - up to 5 volume presets
- 7. Up to 20 Working Protocols** - fully PC-customizable
- 8. Data format and consistency check** - data export through a common SD card
- 9. Customizable Solutions** - optional barcode reader, trolley transport case, and RFID antenna integrated in the tray





The new **HemoMix 3** is a modern blood collection monitor (Class 1 Medical Device). Carefully designed for a powerful, versatile, and intuitive use, its bi-directional communication allows it to direct custom text messages to the screen, including identity check information and warnings to the operator.

HemoMix3 accepts all kinds of blood bags. Its 3D orbital mixing guarantees the best mix possible with programmable motion, including pauses and inversion. HemoMix3 can even work without AC power, using its optional, built-in, removable, rechargeable, high-capacity battery pack.

Its versatility is enhanced by its adjustable warnings for low and high flow, bumps, and maximum donation time. It also features warnings self-reset and latency-time warnings, pre-alarm-time, and predictive logic controls.

The default values for the most common parameters of collections are programmable, while the target volume can be easily modified during the donation. HemoMix3 also features an auto tare of the empty bag with an automatic clamp closing at the beginning and end of the donation procedure, paired with additional audio and visual warnings. Safety detectors constantly check the proper position of the tube in the clamp and the actual clamp position.

All collected data can be recalled and read directly from the mixer memory, transferred onto a memory card (optional MMC/SD or USB-stick reader), or even sent to a PC via wired or wireless network.

### HemoMix3 Allows You to Work With

- All types of bag
- 3D orbital mixing, with programmable motion, pauses, and inversion
- With or without AC power (optional, built-in, removable, rechargeable high-capacity battery pack)
- Programmable default values for most common parameters of collections
- Optical pre-alarms and optical/audible warnings, with 3 volume levels, muting, and self-reset
- Safety detectors (proper position of tube into the clamp + actual clamp position)
- Auto tare of the empty bag with automatic clamp closing
- Scale mode and user selected units (ml or grams), with custom defined gravity
- Recall of collected data from the mixer memory or transferred onto the memory card (optional MMC/SD or USB-stick reader)
- Barcode or RFID data format parameters, completely customizable by software
- Automatic change of program, target volume, and sampling tube number (optional)
- Custom text messages shown on the screen, also sent by LIMS for a positive donor identity check
- Delcon custom LinkMix software through Wi-Fi, Ethernet, or RS485 communication mode



### An Intuitive Design

The high-contrast graphic display with an icon-based, animated user interface and powerful diagnostics are the perfect allies for the operator.

The special multicolor, 360°-visible indicator light allows for an easy understanding of statuses and alerts, enhancing the safety, and the overall quality of the donation process.

### Smart Flow Alarms

All warnings and alarms are engineered to enhance the donation process.

Low-flow warnings have a **self-reset** and a **latency-time, pre-alarm-time**, and warning logic. During pre-alarm time, the display icon and the red blinking indicator are a cue directed to the donor to make a fist to increase the blood flow. After the pre-alarm time, optical and audible warnings alert the operator. High-flow warnings only have a latency time, before optical and audible alarms. Sound alarms have muting, rest, and 3 volume levels.



### Predictive Timeout

Every collection has **2 timeout levels**: once 50% of the first timeout has elapsed, the inner microcomputer starts a **predictive evaluation** of the time required for the total collection. If this time exceeds the first threshold, a warning icon alerts to a slow collection, and allows for **countermeasures**.

At the first timeout, the collection will stop if 90% of the target volume is already achieved. Otherwise, the timeout icon will pop out and the collection will continue until the second timeout.

### Integrated RFID Antenna

An RFID antenna embedded beneath the 3D mixing tray allows for automatic data retrieval by reading and writing data directly on the bag with no operator trigger needed.

Barcode or RFID data parameters can be completely customized through the software.



# Networking HemoMix3: bi-directional communication for a better donation process

## Powerful Bi-Directional Software

The LinkM software allows for an easy pairing through a wired or wireless connection.

A quick and easy donor identity check speeds up the whole donation process, while the brand new donation monitor is a super easy solution to handle multiple donations. The database allows for the export of printable reports.

**Bidirectional Ethernet and RS485 serial network connections** for a comprehensive device configuration, as well as real time data transfer to the LinkMix software.

**CCD or laser barcode reader** (optional) for data acquisition and management with format check.

**Wi-Fi** (optional) for high-speed, bi-directional wireless network, using market standard IT infrastructures.

**RFID** (optional) with embedded antennas for a completely transparent process.

## Full Information at a Glance

### During collection, HEMOMIX3 allows you to monitor:

- Donation time and timer limits
- Collected blood and target quantity, in weight or volume
- Real time blood flow and its accepted range
- Analog progress bar & informative status line showing diagnostics
- Number of records in the internal memory
- Status of the network connection
- Residual charge of battery
- Volume of sound alarms
- Status of the tube position in the clamp

### After collection, HEMOMIX3 allows you to check:

- Final volume collected
- Average flow
- Donation time
- Total pause time

## Sales Codes

HMIX3.LAN	Mixer LAN version, Ethernet network communication (HUB required)
HMIX3.LAN.RFID	Like HMIX3.LAN with built-in RFID antenna
HMIX3.WIFI	Mixer WLAN version, Wi-Fi communication (Access Point required)
HMIX3.WIFI.RFID	Like HMIX3.WIFI with built-in RFID antenna

## Main Optional Accessories

HMIX3.DB.20	USB memory stick
CAL-MAS.500	500 g calibration mass
CAL-MAS500C	500 g calibrated weight with SIT certificate
CCD-BARCD1	CCD barcode reader
LSR-BARCD1	Laser barcode reader
BAT-PK.12V	12V battery pack
TROLLEY-1.DLC	Trolley transport case <i>(can be used as support for mixer too)</i>
ADAP-485-USB	RS485 network adapter for USB computer connection <i>(1/each serial network)</i>
ACC-POINT	Wi-Fi access point <i>(1/each wireless network)</i>
HUB-PC	HUB Ethernet 16 entries <i>(1/each Ethernet network)</i>
DCSX_CORE	LinkMix software for Windows® <i>(free license for configuration and monitoring)</i>
DCSX_DM	LinkMix software extension license for data management <i>(requires DCSX_CORE)</i>
DCSX_BC	LinkMix software extension license for bi-directional communication <i>(requires DCSX_DM)</i>

## Technical Data

CE marking:	Complies with Class 1 Medical Device according to directive 93/42 MDD and 2007/47 MDD
Reference Standards:	IEC 60601-1, EN 60601-1 <i>(Safety)</i> IEC 60601-1-2, EN 60601-1-2 <i>(EMC)</i>
Safety Class:	1
Applied part:	CF
Dimensions	351D x 221H x 273W mm
Weight	3 kg <i>(without battery)</i>
Power supply:	115/230 VAC ±10% or with internal battery pack 12VDC <i>(option)</i>
Line frequency:	50÷60 Hz
Power consumption:	45 VA
Type of mixing:	Orbital 3D with programmable motion, pauses, and rotation inversion
Weighing range:	10÷990 ml
Accuracy:	±1% within the range 300÷600 ml
Conditions of use:	Temperature 10°÷40°C; RH <90% without condensation at atmospheric pressure of 700÷1060 hPa





# HEMOMIX 3

IS AN ELECTRONIC BLOOD COLLECTION MONITOR

With bi-directional data communication,  
RFID data management, and a high contrast display.

Paired with powerful LinkMix software, it is the best device even in  
challenging mobile donation environments.



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For ordering and technical information, please download the full DataSheet from our website.

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