



SmartDispenser 3.0



Highest level of security and precision for semen dilution

The SmartDispenser 3.0 is an intelligent combination of devices that ensures accurate extender dosing (± 1 g or ± 2 g depending on model). It helps to achieve very precise sperm cell numbers per dose and an efficient workflow in the semen laboratory.

The SmartDispenser 3.0 assembly includes the pump unit with integrated controller, the scale, a stand to hold the tubing, and the required tubing with sinker. The SmartDispenser controller activates the peristaltic pump until the target weight is reached according to the scale reading.

By accurately weighing the extender, the SmartDispenser is superior to a rotary peristaltic pump. It eliminates dosing inaccuracies due to different tubing materials or diameters, varying wall thicknesses, and tubing aging. Aspirated air does not affect the system. Errors caused by different filling levels in the vat cannot occur.



SmartDispenser 3.0 - What is new?

The SmartDispenser 3.0 represents a significant evolution of the already proven SmartDispenser 2.0 model:

- The new design of the pump unit and controller is modular, allowing a second pump unit to be added on top
- The integration of the pump unit and controller results in a smaller footprint compared to the previous SmartDispenser model
- The newly designed pump units are quieter and produce less vibration, even at higher speeds, than the previous generation pumps





(+ Your benefits

- + Automatic dilution of ejaculates with the desired extender volume (manual entry or direct transfer from lab management software)
- + High dilution accuracy: constant feedback between pump and controller
- + Quiet and low vibration high flow pump units
- + Small footprint, controller can operate two pump units
- + Connected workflow: can be combined with a heated extender vat and Prism10 lab management software
- + Error-free data handling: the ejaculate to be diluted can be selected by reading the boar information from a label on the ejaculate container with a barcode reader*
- + Worry-free: in case of an unexpected error, dispensing can be resumed from where it stopped
- + High flexibility: allows batch dilution and processing of multiple ejaculates in any order*
- + Pre-dilution option: the pre-dilution volume is dispensed and stored in the device's memory, the final dilution can be resumed at any time later
- + Optimal temperature management: the tubing runs automatically empty after dilution to prevent the extender in the tubing from getting cold between two ejaculates
- + Option: manual mode for just revolving the extender in the vat
- + Simple operation and easy navigation with touch display
- + Splash reduction for less spillage during dilution
- + SmartDispenser L and XL: pulsation damper ensures a smooth fluid flow

**Exclusive feature for Prism10 lab software.*

SmartDispenser 3.0 XL and L

- Guarantee an accuracy of ± 2 g of dispensed extender
- High pump flow rates allow dilution of semen pools with large volumes of extender in a short period of time
- SmartDispenser 3.0 XL and L are half as noisy as pumps with comparable flow rates
- 24 kg scale allows large pools to be diluted in one step
- Come with pulsation damper to smooth out the flow of the dispensed extender

SmartDispenser 3.0 XL 13200/0401
scale up to 24 kg, resolution ± 2 g, pump flow rate up to 12 l/min

SmartDispenser 3.0 L 13200/0402
scale up to 24 kg, resolution ± 2 g, pump flow rate up to 6 l/min



SmartDispenser 3.0 XL

Good to know!

The SmartDispenser 3.0 XL and L can also be used to fill a heated vat with the required liters of pure water from the water supply. Pump and controller are connected to the scale under the heated vat and the required amount of water is pumped into the vat without supervision.



SmartDispenser 3.0 S

- Guarantees an accuracy of ± 1 g of dispensed extender
- Includes pump with flow rate of 1.2 l/min and 2 kg scale
- Facilitates dispensing of smaller volumes with high accuracy, which is necessary for dispensing antibiotic concentrates and for semen extender in bovine and equine labs

SmartDispenser 3.0 S

scale up to 2 kg, resolution ± 1 g, pump flow rate up to 1.2 l/min

13200/0410



SmartDispenser 3.0 S

SmartDispenser 3.0 S, ADA extension

- Provides a convenient way to add a second pump to the SmartDispenser L or XL setup by using one controller to operate both pump units
- Pumps are stackable to maintain the same small footprint
- Extension kit includes a SmartDispenser 3.0 S pump unit, the necessary cables to connect the two pumps together and mounting parts to organize the tubing

SmartDispenser 3.0 S, ADA extension with pump, cables and mounting parts

13200/0420

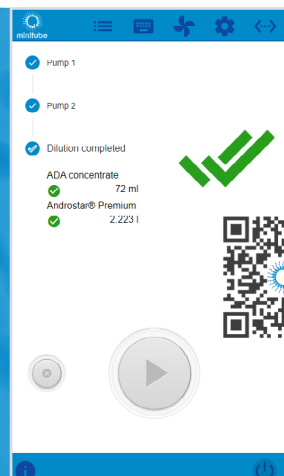


SmartDispenser 3.0 XL and S (ADA extension)

What is ADA?

Minitube's ADA protocol ensures consistent and accurate dosage of antibiotics in extended boar semen. The ejaculate is diluted in a two-step process.

- Antibiotic-free extender is used for the main dilution step
- An antibiotic concentrate is added separately
- The calculated end-volume of the finally diluted ejaculate defines the required volume of the antibiotic concentrate as well as the volume of the antibiotic free main extender
- The same amount of antibiotics is added per sperm cell, independent of the dilution ratio



More information on how ADA can optimize your lab process!



★ Easy and safe application

- Enter the desired extender volume on the touch screen of the controller
- Start the process by confirming the displayed volume to be dispensed
- The controller will then set the pump to high speed and pump the extender into the container placed on the scale
- When the measured quantity reaches the range of the set value, the pump is adjusted to a constantly lower speed until the weight registered by the scale corresponds exactly to the set value
- When processing semen pools, several subsequent filling operations can be initiated one after the other

If the SmartDispenser is connected to the Prism10 lab management software, the desired amount of extender is sent directly to the controller

The scale value is continuously monitored

Either by manually entering extender volumes for each ejaculate to be processed or by sending data from the Prism10 lab management software



🔗 Accessories for model L and XL

Silicone tubing for SmartDispenser 3.0 XL, ø 12.7 x 3.2 mm, 25 m/roll	5013200/6051
Silicone tubing for SmartDispenser 3.0 L, ø 8 x 2.6 mm, 25 m/bag	5013215/0551
Heated extender vat, 100 or 200 l, various versions	13201/0xxx

🔗 Accessories for model S

Tygon® tubing for SmartDispenser S, 15 m/roll	13200/0792
Disposable tubing for SmartDispenser S, 25 m/roll	13200/0791
Heated extender vat, 3 l, with HTi 50 control unit, 230 or 115 V	13201/050x

🔗 Optional accessories

Prism10 lab management software, subscription	13535/0010
Handheld barcode scanner with stand	13201/3542
Display holder for the scale display	13200/0425
Graduated plastic beaker, 5 l	13210/0101
Graduated plastic beaker, 10 l	13210/0102
Pooling bag for 5 l beaker	13203/4050
Pooling bag for 10 l beaker	13203/4100



Learn more about Prism10 lab software

