

Typical Applications

- Precise dispensing of IVD reagents and culture media in small-batch, multi-product workflows.
- Long-term, high-precision feeding for continuous flow reactors.
- Seamless integration with automated instruments and lab platforms.
- Patch-clamp electrophysiology and neural signal recording.
- Organ-on-chip and biomimetic models simulating extremely slow capillary flow.
- Long-term cell culture or chemical reactions requiring timed delivery of media, nutrients, or inducers.
- Automated sampling at scheduled intervals.



Specifications

Product model	GD200-1B	GD400-1B	GD650-1B	GD200-1C
Speed range	0.01-200rpm	0.01-400rpm	0.01-650rpm	0.01-200rpm
Flow rate	0.15µL-1000mL/min	0.15µL-2000mL/min	0.15µL-3250mL/min	0.15µL-2000mL/min
Speed resolution	0.01rpm (<100rpm); 0.1rpm (≥100rpm)			
Speed accuracy	±0.1%			
Calibration function	Flowrate calibration, volume calibration, auto-calibration with a flow meter (optional)			
Display	5-inch color LCD screen shows parameters and statuses, such as pump speed, flow rate, time, volume, etc.			
Work mode	1.Continuous mode: displays the pump speed or flow rate. 2.Time mode: supports repeatable time based dispensing. 3.Volume mode: supports repeatable volume based dispensing.			
Control mode	Touchscreen+ keypad control; foot switch / handheld dispenser control; external signal control; communication control			
External control	Start/stop control, direction control: 5V-24V logic level signal or relay signal (dry contact) Speed control: 4-20mA, 0-5V, 0-10V, 0-10kHz, the signal range and speed range can be configured on the pump. Multiple sources can be enabled simultaneously.			
Communication control	RS485 interface, Modbus RTU protocol or Longer OEM protocol			
Status output	Pump speed: 10Hz/rpm, OC gate frequency signal Running/stop: 24VDC/ 0.1A relay, open for stop Running direction: 24VDC/ 0.1A relay, close for clockwise Other alarms: 24VDC/ 0.1A relay, close for alarms			
Parameter recipes	100 dispensing parameter recipes can be saved and recalled easily in the volume mode.			
Voice control	Control the pump start, stop/pause, direction, and full-speed operation via voice commands.			
Scheduled start	Automatic countdown and start at a preset time (up to 99h 59min 59s)			
User access control	Three-level user access management, configurable to enable or disable			
Log record	Logs can be recorded, reviewed and exported. Up to 4,000 log entries can be stored on the pump.			
Pump status when powered up	The pump defaults to a stopped status on power-up. In continuous mode, the pump can be configured to resume the status before power-off.			
Dimensions (LxWxH)	305mm×190mm×201mm			
Noise (@ 1 meter)	≤50dB (A)			≤55dB (A)
IP rating	IP32			
Weight (drive only)	3.5kg		5.5kg	

LONGER
A Halma company



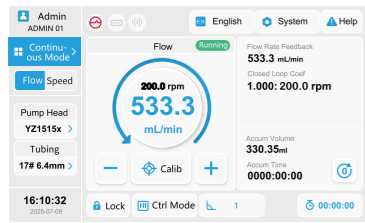
GD200/GD400/GD650 Series General Dispensing Pump



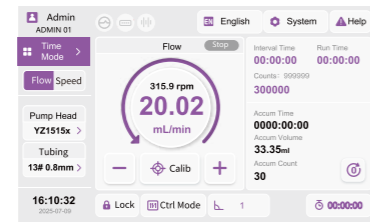
Closed-loop automatic flow calibration for continuous mode, eliminating manual calibration work.

Intuitive, user-friendly operation for quick setup and effortless operation.

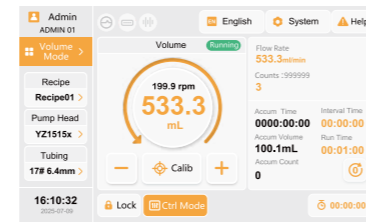
1. Three-color UI distinguishes work modes: Continuous, Time, and Volume/Dispensing. The interface is clear and intuitive—no manual required.



Continuous mode



Time mode



Volume mode

2. High speed accuracy of $\pm 0.1\%$ even at an ultra-low speed of 0.01rpm.



3. A handheld dispenser greatly simplifies batch pipetting and filling. During pauses, it can be magnetically attached to the pump bracket to prevent tubing contamination.



4. Works with a flow meter to enable closed-loop automatic flow calibration in continuous mode, maintaining accuracy during long-term dosing without drift.

5. Noise level remains below 55 dBA even at maximum speed under full load, ensuring quiet operation.



6. Scheduled start function – the pump automatically starts and runs at the preset time.

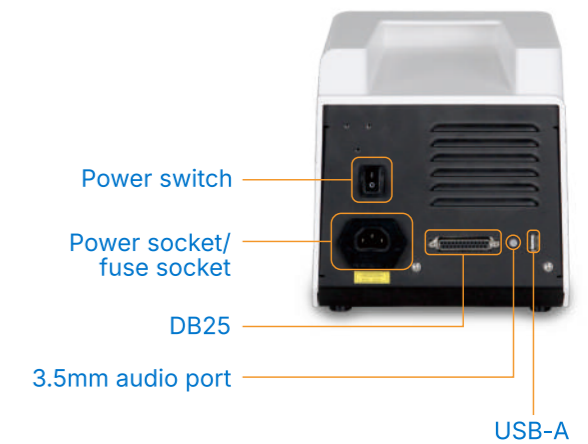
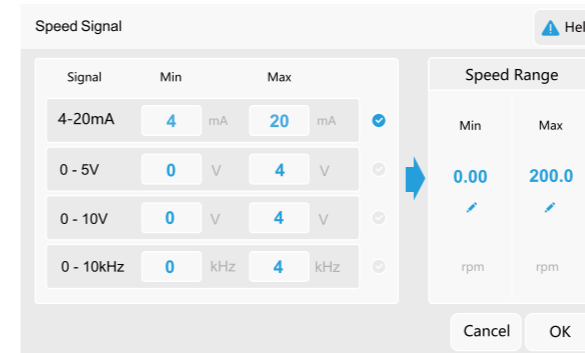


99h59m59s

00:00:00

Automatically starts and runs

7. DB25 interface supporting extensive external control, communication, and status output functions. Multiple control sources can be configured simultaneously, enabling easy integration with automation systems.



8. "Longer, Longer" Easily activate voice control for hands-free, contactless operation.

