

handheld screw cap decapper with rechargeable lithium battery

Handheld screw cap decapper is a portable tool designed for laboratories to efficiently and safely complete the opening and closing operations of sample tubes with screw caps.

Handheld Screw Cap Decapper

Main Features

1. Multi-channel design: Available in 1-channel, 6-channel, and 8-channel models for different sample tube arrangements and throughput needs.
2. Fast operation: Opens/closes multiple tube caps simultaneously in under 3 seconds; compatible with SBS standard well spacing and automation interfaces.
3. Intelligent torque control: Built-in limiter ensures secure sealing without damaging tube caps or seals.
4. Safety protection: Minimizes direct contact with samples/reagents, reducing biosafety risks.
5. Portable charging: Rechargeable lithium battery, USB fast-charging—flexible for any lab or field environment.



Advantages

1. Efficient & convenient: Multi-channel design saves significant experimental time, streamlining sample handling.
2. Protects sample integrity: Controlled torque prevents leaks and contamination from improper cap opening.
3. Enhanced operational safety: Reduces cross-contamination and operator risk compared to manual capping.
4. Adaptable: Wireless, portable—ideal for field sampling, mobile labs, and traditional labs.
5. Ergonomic: Comfortable handle design minimizes fatigue for extended use.

Working Principle

Motor-driven rotary motion turns specialized cap-opening heads matched to tube screw caps. Torque limiter halts rotation at preset level for precise opening/closing. Synchronized multi-channel drive ensures simultaneous action and uniformity. Powered by rechargeable lithium battery, charged via USB for long-term use.

Application Areas

1. Biomedical research: Rapid processing of frozen/sample tubes for cell culture, genetic testing, protein analysis, etc.
2. Clinical testing: Efficient opening/closing of blood, urine, and other samples in hospital labs.
3. Environmental monitoring: Portable tube switching for field sampling.
4. Biopharmaceutical: High-throughput sample handling for QC and product development.
5. Universities/research: Daily sample management, boosting efficiency and safety in labs.

Model	CD10-1	CD10-6	CD10-8
Power supply	4.2Vdc, 0.5A		
Li-ion battery capacity	800mA	1200mA	1200mA
How to use	Handheld, automatic		
Opening method	1 cap	6 cap	8 cap