



Laboratory

Dispersion, Mixing
Homogenization and Emulsification Solutions



DISRAD is located in the West Midlands of central England. With years of experience in laboratory dispersion technology, DISRAD focuses on providing diverse processing solutions for sample dispersion, homogenization, emulsification, suspension, mixing, and other needs, thanks to its rich design and production experience.

Our disperser drivers and dispersion tools have been carefully developed and designed. The original imported drive and quick insert coupling interface provide users with safe, reliable, and efficient power support with their excellent durability and stable speed. The unique modular design of the dispersion tools allows for flexible assembly of various types of dispersion tools, which not only facilitates daily maintenance and replacement, but also greatly improves the equipment's wide adaptability, achieving a dual optimization of economy and efficiency.

DISRAD has demonstrated strong capabilities and unique advantages in technological innovation. The company focuses on product research and development design, and provides personalized customization services to meet the actual needs of different users, tailoring comprehensive solutions for customers. Whether in the fields of biopharmaceuticals, daily cosmetics, ink coatings, fine chemicals, food, or energy, DISRAD's products can be accurately positioned and widely covered, demonstrating unlimited application potential and broad market prospects. In addition, DISRAD has long provided OEM and ODM outsourcing services, and its products are highly trusted.

Looking ahead to the future, DISRAD will continue to uphold the concept of "customer-centric", continuously improve product performance and service quality, and provide more outstanding laboratory decentralized technology solutions for global customers. We look forward to working together with you to create a better future!

CONTENTS

Handheld Disperser	01
X200 D	01

Batch Disperser	05
X700	05
X2000	11
X3000	17
X4000	23

Dispersion Tools	29
Series-T	31
Series-E	34
Series-C	41
Series-CB	51

Disperser Stand	64
Economical Stand	64
Electric Stand	65

X200D small disperser, equipped with a 200W high-power motor, microprocessor electronic speed regulation, wide speed range of 5,000–30,000rpm, and LED digital display. It can process 0.5–600ml of sample solution in a short period of time, especially for handling trace samples, making it an ideal choice for handheld or desktop operations in biological, pharmaceutical, and medical laboratories.

X200 D Handheld Disperser

Handheld or Desktop | Digital Speed Display



High Performance

- High power, strong torque, long-lasting operation
- High-performance motor and microprocessor ensure precise and stable speed control

Speed

- LED digital display, which can clearly and intuitively display speed values
- Wide speed range for low & high-speed homogenization

Humanized

- Ergonomic design, comfortable grip, easy one handed operation
- ClickLock quick-plug interface makes it convenient and fast to install tools
- External carbon brush design, easy to maintain

Dispersion Tools

- 12 types of tools to meet the needs of diverse samples (Standard /Serrated /Fiber /Turbulent ,etc.)
- Simplified structural design, no need for specialized tools for disassembly and assembly, easy and fast cleaning
- Specially made Polyflon™ PTFE shaft sleeve,excellent wear resistance and chemical stability
- Resistant to chemical, steam and dry heat sterilization

Disperser Stand

- Optional Stand for long-term fixed operation or temporary storage

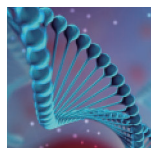
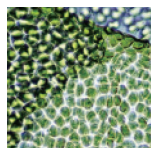
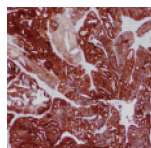
Quality Assurance

- CE Certified; 1-Year Warranty

Handheld Disperser | X200 D



Project Name	Technical Data
Model	X200 D
Order Number	22232.02
Drive Motor	Carbon Brush
Input Power	200W
Speed Range	5000~30000rpm
Speed Step	1000rpm
Speed Display	LED Digital Display
Volume range(H ₂ O)	0.5~600ml
Maximum Viscosity	6000mPa.s
Maximum Line Speed	12.5m/s
Working Hours	≤15min (T14)
Blade Diameter	Ø 5, 7, 10, 12, 14mm
No-load Noise	74dB (A)
Sample-contacting Material	AISI 316L/PTFE
Sample Solution PH Contact	2~13
Processing Type	Batch
Dimensions (Driver)	Ø 52 × H250mm
Weight	680g
Working Environment	5~40°C, ≤85%RH
Rated Voltage	AC 220~240V, 50/60Hz



- Fine homogenization and dispersion of animal and plant tissues in buffer solutions
- Efficient lysis of animal and plant cells, microorganisms, and enzyme sources.
- Extraction of active pharmaceutical ingredients (APIs) from pills or tablets.
- Efficient preparation, dispersion, and stability optimization of emulsions and suspensions.
- Preparation of uniform and stable suspension for biological vaccine injection.
- Sample Prep for Medical PCR & Nucleic Acid (RNA/DNA) Analysis.
- Bio-gene, enzyme research, protein extraction & cell disruption.
- Extraction of components from food or natural products.

Handheld Disperser | X200 D

Standard Type S

Special geometric stator, paddle/double-toothed blade rotor, large vortex, uniform sample dispersion. Applicable to shearing, dispersing, dissolving, mixing and homogenizing most samples.

Order No.	Model	Diameter/Length	Volume Range
130511	T5S	Ø 5mm/80mm	0.5~10ml
130711	T7S	Ø 7.8mm/110mm	0.5~50ml
131011	T10S	Ø 10mm/120mm	1~100ml
131211	T12S	Ø 12mm/120mm	1.5~200ml
131411	T14S	Ø 14mm/160mm	5~500ml



Serrated Type W

Sawtooth and slotted stator, double-toothed blade rotor, high shear force. Applicable to shearing, dispersion, mixing and homogenization of most samples, especially animal and plant tissues and fine fiber samples.

Order No.	Model	Diameter/Length	Volume Range
130521	T5W	Ø 5mm/80mm	0.5~5ml
130721	T7W	Ø 7.8mm/110mm	0.5~50ml
131021	T10W	Ø 10mm/120mm	1~100ml
131221	T12W	Ø 12mm/120mm	1.5~200ml
131421	T14W	Ø 14mm/160mm	5~500ml



Fiber Type F

"V"-tooth stator prevents soft/filamentous fibers entangling in cutter. Applicable to shearing, homogenizing high-fiber samples, stirring, mixing, dissolving high-viscosity samples.

Order No.	Model	Diameter/Length	Volume Range
131431	T14F	Ø 14mm/160mm	5~500ml



Turbulent Type M

Fluid mechanics design, stator inclined holes and moving blades form good vortices, efficient heat transfer, low shear and heat. Quickly remove foam and supernatant particles. Applicable to mixing and dissolving medium and high viscosity samples.

Order No.	Model	Diameter/Length	Volume Range
131441	T14M	Ø 14mm/160mm	5~600ml



Handheld Disperser | X200 D Accessories

Drive

Order Number	Description
22232.02	X200D Driver: AC230V, 50/60Hz, 200W. Includes main unit, wrench, operation manual, warranty card, certification of conformity



Standard Set

Order Number	Description
21063.02	X200D driver, T5W serrated tool, ST10 basic stand
21064.02	X200D driver, T10W serrated tool, STL1 single-rod stand



Disperser Stand

Order Number	Description
170109	ST10 basic stand, POM resin, L150 × W200 × H310mm, safe, convenient temporary placement and storage
170110	STL1 single-rod stand, aluminum alloy, L200 × W310 × H600mm, adjustable up/down, suitable for handheld disperser fixed use



Accessories

Order Number	Description
173010	CT15 test tube holder, clamping range $\varnothing$ 10–25mm, for 15ml centrifuge tubes or equivalent containers
173020	CT50 test tube holder, clamping range $\varnothing$ 20–40mm, for 50ml centrifuge tubes or equivalent containers
171400	CT80 beaker holder, clamping range $\varnothing$ 38–85mm, for beakers or equivalent containers



Retain technical modifications

More accessories available at our website: www.disrad.com