

COLO-DT806AT Intelligent Dissolution with Automatic sampling workstation

Product Details

Product Number

PRO6780



Technical Specification:

COLO-DT806AT — Automatic Sampling Dissolution System, 8 Cups + Automatic Sampler

[Catalog \(PDF\)](#)

- 8 cups
- 10–300 rpm
- RT–45°C ($\leq \pm 0.2^\circ\text{C}$)
- Automatic sampling
- Injection pump sampling
- 2-stage filter (HPLC-ready)
- 39 sampling points
- Audit trail + user roles
- IQ/OQ/PQ docs

OVERVIEW

COLO-DT806AT is an **automatic sampling dissolution system** consisting of an **8-cup dissolution device** and an **automatic sampler**. It is designed to support integrated workflows including **automatic dosing, dissolution and sampling**, with **precise temperature control, precise sampling, automatic liquid replenishment and automatic cleaning**.

The platform supports **paddle and basket** methods with a **coaxial mechanical design** to maintain stable hydrodynamics and consistent station-to-station performance. The system also includes an **automatic lifting platform** that helps preserve verticality and coaxiality during long-term operation.

For regulated environments, COLO-DT806AT provides structured **user management, audit tracking**, and qualification support with **IQ/OQ/PQ documentation**.

KEY FEATURES

- **8 cups** dissolution system with **1000 mL glass vessels** for parallel dissolution runs.
- **Rotation control 10–300 rpm** for method flexibility.
- **Water bath heating** with temperature control **RT–45°C** (deviation < **±0.2°C**).
- **Temperature monitoring: 8-channel** monitoring; measurement resolution **0.01°C**.
- **Automatic sampling workstation:** injection pump sampling with **12 sampling channels** and up to **39 sampling points**.
- **Online secondary filtration:** two-stage filter; compatible with common **0.45 µm** filters for HPLC-ready samples during sampling.
- **Automatic center positioning** of dissolution cups (automatic orientation/locking) to reduce positional variability.
- **Automatic lifting system** to support long-term mechanical stability (verticality/coaxiality).

COLO.SCIENCE KNOWLEDGE

Dissolution testing guide: USP/EP methods, mechanics, validation and best practice

Build confident dissolution workflows with clear explanations of paddle vs basket methods, bath temperature control, mechanical performance, validation logic and documentation. COLO.Science is our knowledge hub for regulated pharmaceutical testing.

[Read on COLO.Science →](#)

COMPLIANCE & VALIDATION

COLO-DT806AT is designed for dissolution testing workflows aligned with major pharmacopeial requirements (e.g.,

USP and ChP) and mechanical validation guiding principles referenced for dissolution meters.

- **Standards reference:** USP, ChP, Mechanical Validation Guiding Principles (per technical documentation).
- **Qualification support:** IQ/OQ/PQ documentation and related validation materials can be provided.
- **Optional:** Precision Mechanical Verification System (COLO-260DT) is referenced as a non-standard configuration.

Full validation documentation set and supporting materials can be provided on request.

MODEL & DIMENSIONS

Model	Stations	External dimensions (L×W×H)	Weight
COLO-DT806AT (Host)	8 cups	570 × 720 × 630 mm	60 kg
Automatic Sampler (Workstation)	12 channels / 39 points (method dependent)	640 × 445 × 430 mm	40 kg

TECHNICAL SPECIFICATIONS

Product	COLO-DT806AT Automatic Sampling Dissolution System
Stations	8 cups
Levelness	≤ 0.2°
Verticality (rotation shaft)	90.0° ± 0.5°
Verticality (dissolution cup)	90.0° ± 0.5°
Coaxiality (cup/shaft)	≤ 1.0 mm
Swing (rotation shaft)	≤ 0.2 mm
Swing (rotation basket)	≤ 0.5 mm
Speed range	10–300 rpm
Heating	Water bath heating
Temperature control	Room temperature–45°C (deviation < ±0.2°C)
Temperature monitoring	8 channels; resolution 0.01°C
Sampling method	Injection pump sampling
Maximum sampling	20 mL (sampling accuracy < ±0.1)
Minimum sampling interval	First point 2 min; other points 5 min
Sampling channels	12
Sampling points	39
Filter	Two-stage filter
Sampling rack	104 position test tube rack; 104 liquid phase bottle rack
Max working time	9999 h
Power supply	AC 220 V ± 10%, 50/60 Hz
Power	Host: 2 kW; Sampler: 0.3 kW
Weight	Host: 60 kg; Sampler: 40 kg

Detailed mechanical validation tolerances and full documentation package are available on request.

SOFTWARE & DATA INTEGRITY

- **User management:** multi-level permissions (administrator / supervisor / operator) and user groups.
- **Account capacity:** preset up to **1000** login accounts; software references **1000+ storage methods**.
- **Audit tracking:** login, operation, experimental records and exception reports; electronic data is protected (not editable/deletable per documentation).
- **Storage:** capacity referenced at **~25,000** experimental data records.
- **Backup & access:** real-time backup via USB or enterprise server; remote viewing/printing via enterprise server login.
- **Paperless reports:** network printer support; storage on instrument/USB/server.
- **Remote upgrades:** remote OS/software upgrade support (configuration dependent).

Exact features may vary by configuration and market; confirm requirements with the COLO team.

STANDARD DELIVERY & OPTIONS

Standard delivery (typical):

- **COLO-DT806AT** Intelligent Dissolution with Automatic sampling workstation (1 set)
- Drive head (8 positions) + automatic lifting device
- 8.0" high-resolution touch screen
- Temperature monitoring system + mobile temperature sensor (PT100)
- Water tank + vessel covers (8 pcs)
- 1000 mL glass vessels (8 pcs)
- SS 316L shafts (8 pcs) + SS 316L paddle blades (8 pcs)
- Basket set: tops for basket with stirring shaft (8 pcs) + baskets without cover, 40 mesh (8 pcs)
- Sample delivery trays (8 pcs) + calibration balls Ø25 mm (8 pcs) + accessory rack
- Software (data integrity oriented)
- **Automatic sampling workstation:** 8-channel syringe pump with secondary online filtering + sample collector (104 positions)
- Rack for HPLC vials (1.5 mL); sampling test tubes / vials (as specified)
- Documents: Installation (including IQ), OQ, PQ, operating manual, inspection report, certification, warranty card

Options / accessories (available on request):

- Precision Mechanical Verification System (COLO-260DT) (non-standard configuration)
- Additional sampling consumables and filtration accessories
- Extended server integration and connectivity modules (configuration dependent)
- On-site qualification support and 3Q verification services (IQ/OQ/PQ)

Accessories: