

# Superior Overhead Stirrer, Viscosity Measuring | **EVO OS1**



## ✓ Torque Measuring Function

Can measure Torque during operation in real time.

## ✓ Automatic Reverse operation

It is easier to wet samples such as fine powder and can be automatically switched using the Program Operation function

## ✓ Program Settings and Operation Functions

It provides operation time, speed, and forward and reverse operation modes with 9 programs and a total of 11 steps, enabling precise and convenient experiments.

## ✓ Viscosity Calculation

Can be carried out immediately via a easy in use menu.  
The provided Impeller for precise work in torque and viscosity measurement.

## ✓ Target Viscosity Operation

More useful and convenient in experiment. You can set the target viscosity in EVE OS1 and then it will operate until reach target viscosity properly.

## ✓ High Reliability

Upgraded in DC Motor power for powerful stirring.

## ✓ High Safety

Over-Heat, Over-Load, Over Current Protection to secure the safety of products and sample

## ✓ High Durable

Chrome-Plated "Anti-Rust Chuck".

## ✓ Powerful and Soft Supports various viscosity

Belt type gear system with powerful motor realize soft and powerful operation 3 ratio of gear applied products cover wide range of sample

## ✓ High Fidelity Touch Color LCD Display

The wide display enable users a convenient checking on current range of set values for the operation of the product.

## ✓ Telescopic stand provided

Telescopic stand is provided as standard in Set Models for easy use and accurate setting

## ✓ Real Time Monitoring

Stirring operation information can be monitored using a USB port.  
(Option : RS485 Port available for multiple monitoring and control equipment)

### Full Range covered Various Models

EVO OS1-10S

Viscosity 50,000mPas 3,000rpm

EVO OS1-15

Viscosity 100,000mPas 1,200rpm

EVO OS1-10

Viscosity 70,000mPas 2,000rpm

EVO OS1-20

Viscosity 150,000mPas 800rpm

# Specification & Ordering

## EVO Models



| Model                                   | EVO OS1-10S<br>/EVO OS1-10S-Set                                                                                                                                                                                    | EVO OS1-10<br>/EVO OS1-10-Set   | EVO OS1-15<br>/EVO OS1-15-Set   | EVO OS1-20<br>/EVO OS1-20-Set   |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Stirring Capacity                       | Max. 15 Lit. (H <sub>2</sub> O)                                                                                                                                                                                    | Max. 25 Lit. (H <sub>2</sub> O) | Max. 40 Lit. (H <sub>2</sub> O) | Max. 60 Lit. (H <sub>2</sub> O) |
| Maximum Viscosity                       | 50,000 mPas                                                                                                                                                                                                        | 70,000 mPas                     | 100,000 mPas                    | 150,000 mPas                    |
| Maximum Torque                          | 85 Ncm                                                                                                                                                                                                             | 130 Ncm                         | 195 Ncm                         | 293 Ncm                         |
| Gear Rate                               | 1.5:1                                                                                                                                                                                                              | 2.0:1                           | 3.0:1                           | 4.5:1                           |
| Speed Range                             | 50 to 3,000rpm                                                                                                                                                                                                     | 30 to 2,000rpm                  | 20 to 1,200rpm                  | 15 to 800rpm                    |
| Motor Rating(Input / Output)            | 200W / 160 W                                                                                                                                                                                                       |                                 |                                 |                                 |
| Working Direction                       | Forward & Reverse<br>(Can change automatically by program operation)                                                                                                                                               |                                 |                                 |                                 |
| Timer                                   | 99hr 59min                                                                                                                                                                                                         |                                 |                                 |                                 |
| Display                                 | High Fidelity Touch Color 3.5inch LCD Display                                                                                                                                                                      |                                 |                                 |                                 |
| Controller                              | Digital PID Feedback Control<br>High Performance MCU                                                                                                                                                               |                                 |                                 |                                 |
| Viscosity Measurement Range             | 10,000 to 100,000 mPas (15% Deviation)                                                                                                                                                                             |                                 |                                 |                                 |
| Max. Impeller Shaft Diameter            | 10 mm                                                                                                                                                                                                              |                                 |                                 |                                 |
| Program Operation                       | 9 Program, 11 Steps                                                                                                                                                                                                |                                 |                                 |                                 |
| Others - Special function               | Torque Measuring Function in real time<br>Viscosity Calculation<br>Target Viscosity Operation<br>Real Time Monitoring by USB port<br>(Option : RS485 Port available for multiple monitoring and control equipment) |                                 |                                 |                                 |
| Permissible Temp. & Humidity            | 0 ~ 40°C, 80%                                                                                                                                                                                                      |                                 |                                 |                                 |
| Safety Device                           | Overload & Heat Protector for Motor<br>Error Code Display                                                                                                                                                          |                                 |                                 |                                 |
| Material                                | ABS and Aluminum                                                                                                                                                                                                   |                                 |                                 |                                 |
| Extension Arm Size                      | Ø12.7 X L245mm                                                                                                                                                                                                     |                                 |                                 |                                 |
| Power Consumption                       | 280 W                                                                                                                                                                                                              |                                 |                                 |                                 |
| Dimensions (w x d x h) & Net Weight     | 85 X 200 X 250mm, 4.0 Kg / 10.5Kg                                                                                                                                                                                  |                                 |                                 |                                 |
| Packing Size (w x d x h) & Gross Weight | 310 X 365 X 135mm, 4.7Kg<br>/ 290 X 800 X 180mm, 12.3Kg                                                                                                                                                            |                                 |                                 |                                 |
| Power Supply                            | 1 Phase, AC 100 - 240~, 50/60Hz                                                                                                                                                                                    |                                 |                                 |                                 |

| Ordering No. | Model Name      | Description                                                           |
|--------------|-----------------|-----------------------------------------------------------------------|
| LT.OS02040   | EVO OS1-10S     | Superior Overhead Stirrer, Digital, Viscosity 50,000, 3,000rpm, 230V  |
| LT.OS02041   | EVO OS1-10S     | Superior Overhead Stirrer, Digital, Viscosity 50,000, 3,000rpm, 120V  |
| LT.OS02042   | EVO OS1-10S-Set | Superior OS1-10S Package, with OSIP010, OSHC010, OSSR030, 230V        |
| LT.OS02043   | EVO OS1-10S-Set | Superior OS1-10S Package, with OSIP010, OSHC010, OSSR030, 120V        |
| LT.OS02010   | EVO OS1-10      | Superior Overhead Stirrer, Digital, Viscosity 70,000, 2,000rpm, 230V  |
| LT.OS02011   | EVO OS1-10      | Superior Overhead Stirrer, Digital, Viscosity 70,000, 2,000rpm, 120V  |
| LT.OS02012   | EVO OS1-10-Set  | Superior OS1-10 Package, with OSIP010, OSHC010, OSSR030, 230V         |
| LT.OS02013   | EVO OS1-10-Set  | Superior OS1-10 Package, with OSIP010, OSHC010, OSSR030, 120V         |
| LT.OS02020   | EVO OS1-15      | Superior Overhead Stirrer, Digital, Viscosity 100,000, 1,200rpm, 230V |
| LT.OS02021   | EVO OS1-15      | Superior Overhead Stirrer, Digital, Viscosity 100,000, 1,200rpm, 120V |
| LT.OS02022   | EVO OS1-15-Set  | Superior OS1-15 Package, with OSIP020, OSHC010, OSSR030, 230V         |
| LT.OS02023   | EVO OS1-15-Set  | Superior OS1-15 Package, with OSIP020, OSHC010, OSSR030, 120V         |
| LT.OS02030   | EVO OS1-20      | Superior Overhead Stirrer, Digital, Viscosity 150,000, 800rpm, 230V   |
| LT.OS02031   | EVO OS1-20      | Superior Overhead Stirrer, Digital, Viscosity 150,000, 800rpm, 120V   |
| LT.OS02032   | EVO OS1-20-Set  | Superior OS1-20 Package, with OSIP030, OSHC010, OSSR030, 230V         |
| LT.OS02033   | EVO OS1-20-Set  | Superior OS1-20 Package, with OSIP030, OSHC010, OSSR030, 120V         |

## Accessories



OSSR010



OSHC010



OSSR030  
(\* Standard Component  
in Digital Set Models.)

| Ordering No. | Model Name | Description                                                                                                      |
|--------------|------------|------------------------------------------------------------------------------------------------------------------|
| LT.OS00001   | OSSR010    | Standard Plate Stand, for Overhead Stirrer and Homogenizer, 25x37cm Plate, with Rod(80cm height) and Silicon Pad |
| LT.OS00003   | OSHC010    | Clamp for Overhead Stirrers and Homogenizers, up to Ø23mm Rod                                                    |
| LT.OS00004   | OSSR030    | Telescopic Stand for Overhead Stirrer & Homogenizer. (42~64cm height adjustable)                                 |

### Impellers, Stirring Tools with Exchangeable Blades for Overhead Stirrers

| Ordering No. | Model Name | Description                                         |
|--------------|------------|-----------------------------------------------------|
| LT.OS00010   | OSIP010    | Propeller, 3 x bladed, Ø8 L500 mm rod, Ø50 mm blade |
| LT.OS00011   | OSIP011    | Propeller, 3 x bladed, Ø8 L500 mm rod, Ø70 mm blade |
| LT.OS00020   | OSIP020    | Propeller, 4 x bladed, Ø8 L500 mm rod, Ø70 mm blade |
| LT.OS00021   | OSIP021    | Propeller, 4 x bladed, Ø8 L500 mm rod, Ø90 mm blade |

| Ordering No. | Model Name | Description                                                       |
|--------------|------------|-------------------------------------------------------------------|
| LT.OS00030   | OSIP030    | Diamond, 4 x bladed, Ø8 L500 mm rod, Ø90 mm blade                 |
| LT.OS00031   | OSIP031    | Diamond, 4 x bladed, Ø8 L500 mm rod, Ø110 mm blade                |
| LT.OS00040   | OSIP040    | Centrifugal, 2 x bladed, Ø8 L500 mm rod, Ø100 mm blade            |
| LT.OS00050   | OSIP050    | Centrifugal, Teflon-coated, 2xbladed, Ø8 L500mm rod, Ø90mm blade  |
| LT.OS00051   | OSIP051    | Centrifugal, Teflon-coated, 2xbladed, Ø8 L650mm rod, Ø120mm blade |
| LT.OS00060   | OSIP060    | Anchor, 2 x bladed, Ø8 L500mm rod, Ø70 mm blade                   |
| LT.OS00061   | OSIP061    | Anchor, 2 x bladed, Ø8 L650mm rod, Ø90 mm blade                   |
| LT.OS00111   | OSIP111    | Propeller, 3 x bladed, Ø10 L650 mm rod, Ø60 mm blade              |
| LT.OS00121   | OSIP121    | Propeller, 4 x bladed, Ø10 L650 mm rod, Ø90 mm blade              |
| LT.OS00130   | OSIP130    | Diamond, 4 x bladed, Ø10 L650 mm rod, Ø90 mm blade                |
| LT.OS00131   | OSIP131    | Diamond, 4 x bladed, Ø10 L650 mm rod, Ø110 mm blade               |
| LT.OS00161   | OSIP161    | Anchor, 2 x bladed, Ø10 L650 mm rod, Ø90 mm blade                 |
| LT.OS00162   | OSIP162    | Anchor, 2 x bladed, Ø10 L800 mm rod, Ø140 mm blade                |