



**INNOTECH**  
LASER

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# Rack Mount Chillers

## $\pm 0.1^{\circ}\text{C}$



**RMUP-300**

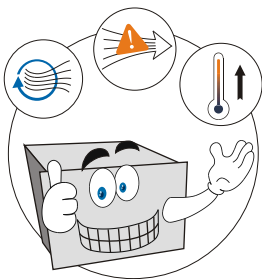
**RMUP-500**

**Air-cooled  
Compact &  
Light-weight**



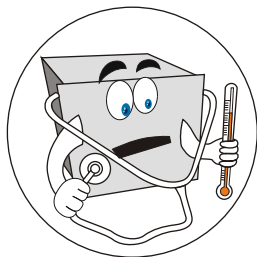
# Specifications

| Item                            |   | RMUP-300                               | RMUP-500 | RMUP-500 <sup>P</sup> |        |               |
|---------------------------------|---|--|----------|-----------------------|--------|---------------|
| Temperature stability           | PID control                             | ±0.1°C                                 |          |                       |        |               |
| Cooling power                   | 20°C Water Temp @ 20°C Ambient temp     | 380W                                   | 290W     | 580W                  | 600W   | 1240W         |
|                                 | 20°C Water Temp @ 30°C Ambient temp     | 320W                                   | 240W     | 530W                  | 610W   | 1178W         |
| Refrigerant                     |   | R-134a                                 |          |                       | R-407c |               |
| Power supply                    | Voltage                                 | AC 1P 220~240V                         |          |                       |        |               |
|                                 | Frequency                               | 50Hz                                   | 60Hz     | 50Hz                  | 60Hz   | 50Hz 60Hz     |
|                                 | Current                                 | 0.5~2.7A                               | 0.5~2.5A | 0.6~2.9A              |        | 0.91~5.41A    |
|                                 | Machine power consumption               | 0.63kW                                 |          | 0.65kW                |        | 1.99kW 2.89kW |
|                                 | Compressor power                        | 0.21kW                                 | 0.27kW   | 0.32kW                | 0.35kW | 1.73kW 2.09kW |
|                                 |   | 0.29HP                                 | 0.36HP   | 0.44HP                | 0.46HP | 2.32HP 2.8HP  |
| Communication                   | RS485 Modbus RTU communication protocol |  |          |                       |        |               |
| Water circuit                   | Pump power                              | 0.05kW                                 |          | 0.09kW                |        | 0.2kW         |
|                                 | Max. pump flow                          | 13L/min                                |          | 16L/min               |        | 38L/min       |
|                                 | Max. pump pressure                      | 12M                                    |          | 25M                   |        | 40M           |
|                                 | Tank capacity                           | 3L                                     |          | 5.5L                  |        | 7L            |
|                                 | Flow sensor                             | Flow rate readable                     |          |                       |        |               |
|                                 | Default high-low temperature alarm      | 5°C low, 45°C high temperature alarm   |          |                       |        |               |
|                                 | Water level indication                  | Water level display externally mounted |          |                       |        |               |
|                                 | Inlet and outlet                        | Rp1/2"                                 |          |                       |        |               |
| Application range - temperature | Coolant water outlet                    | 10-35°C                                |          |                       |        |               |
|                                 | Ambient temperature & humidity          | 15-40°C                                |          |                       |        |               |
|                                 | Transportation & storage                | 0-70°C                                 |          |                       |        |               |
| Noise (dB(A))                   | < 50                                    |  |          |                       | < 65   |               |
| Dimension                       | Product                                 | 49x48x18cm                             |          | 49x48x26cm            |        | 67x48x33cm    |
|                                 | Packing                                 | 59x53x26cm                             |          | 59x53x34cm            |        | 74x57x50cm    |
| Weight                          | Net weight                              | 19Kg                                   |          | 21Kg                  |        | 35Kg          |
|                                 | Gross weight                            | 21Kg                                   |          | 24Kg                  |        | 39Kg          |



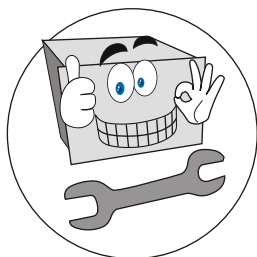
## Intelligent functions

- \* Low tank water level detecting
- \* Low water flow rate detecting
- \* Over water temperature detecting
- \* Heating of the coolant water at low ambient temperature



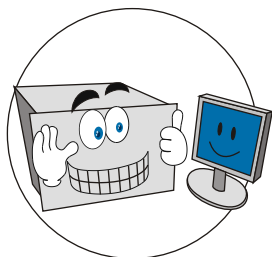
## Self-check display

- \* 12 types of alarm codes



## Easy routine maintenance

- \* Toolless maintenance of dustproof filter screen
- \* Quick-replaceable optional water filter



## Communication function

- \* Equipped with RS485 ModBus RTU protocol

# Energy Saving

It can maintain good and stable cooling performance under different temperature working environment, and low energy consumption of maximum 800W/1400W.

## RMUP-300

### Performance Graphs

20°C

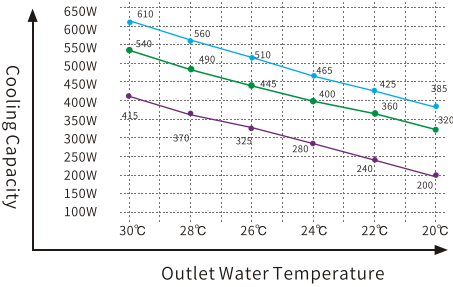
Ambient Temperature 20°C

30°C

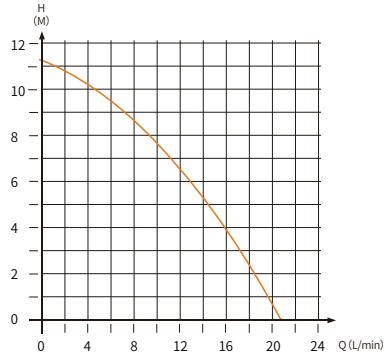
Ambient Temperature 30°C

40°C

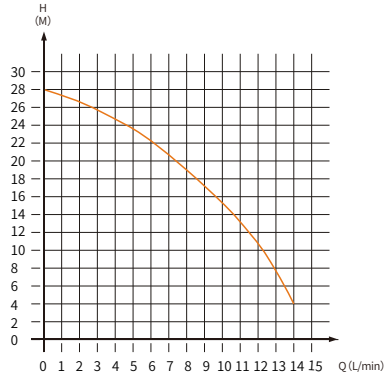
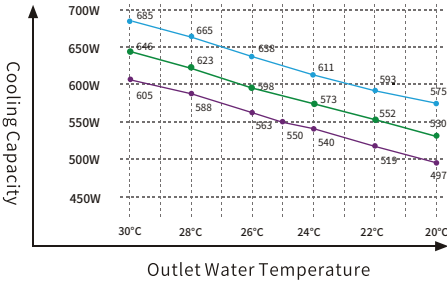
Ambient Temperature 40°C



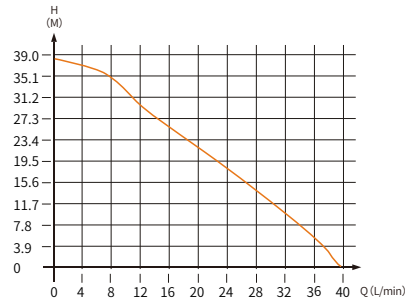
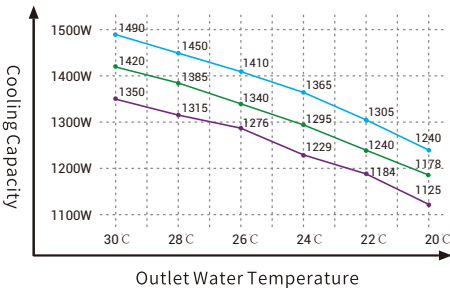
### Pump Performance Graph



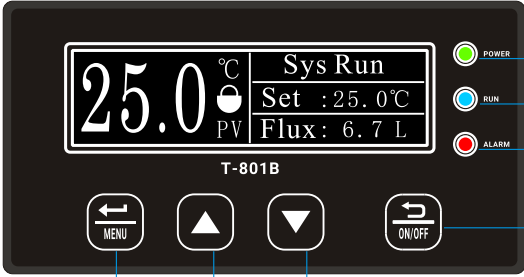
## RMUP-500






## RMUP-500<sup>P</sup>








# Easy Operation

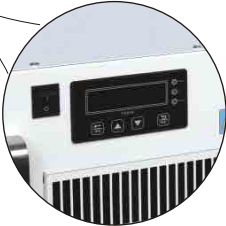


-  POWER
-  RUN
-  ALARM

Return/on/off key

Menu/confirm key    Up/+ key    Down/- key

- Press  to turn on the power
- Press  to enter the menu
- Press   to adjust the temperature setting
- Press  to complete the setting



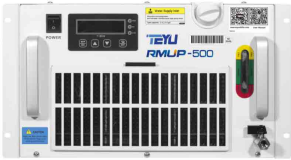
# Mountable in a 19-inch rack Space-saving

RMUP-300



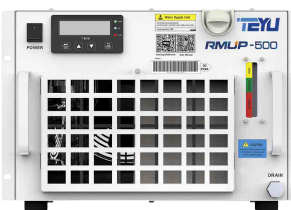
18cm 4U

RMUP-500



26cm 6U

RMUP-500P



33cm 7U



# Application Examples

## UV Laser Marker Ultrafast Laser marker

Laser cooling



## X-Ray Inspecting Instrument

X-Ray tube and X-Ray light cooling



## Electronic Microscope

Electron beam device cooling



## Analysis Equipment

Analysis device cooling



# External Dimensions

## RMUP-300 / 500

Water supply inlet

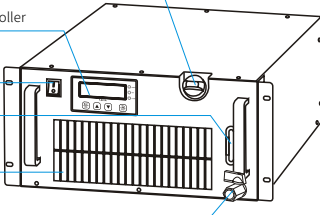
Temperature controller

Power switch

Water level gauge

Air inlet  
(filter gauze)

Drain



Power socket

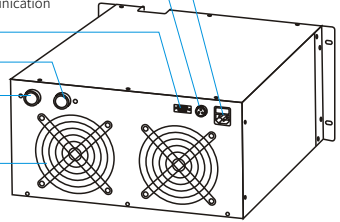
Alarm output port

RS485 Modbus communication  
output port

Cooling water inlet

Cooling water outlet

Air outlet



## RMUP-500P

Water supply inlet

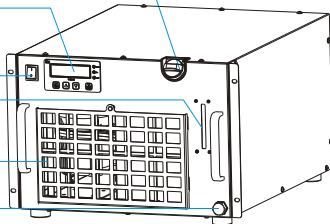
Temperature controller

Power switch

Water level gauge

Air inlet  
(filter gauze)

Drain



Power socket

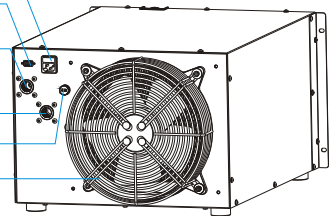
Signal output/input port

Cooling water inlet

Cooling water outlet

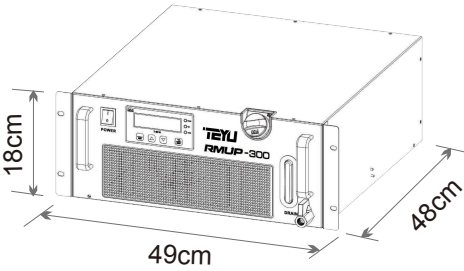
Alarm output port

Air outlet

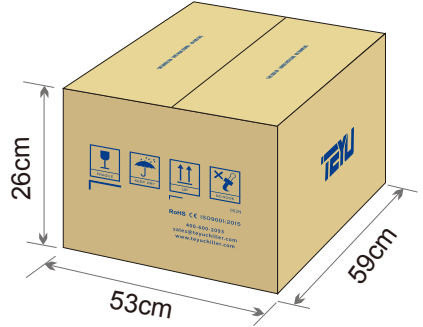


## Dimension :

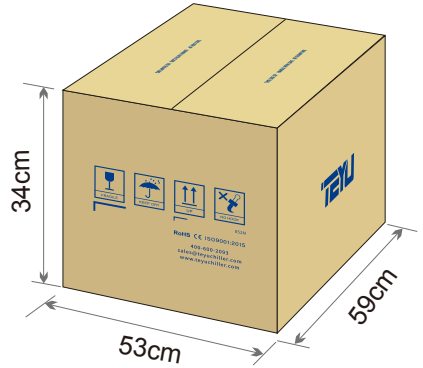
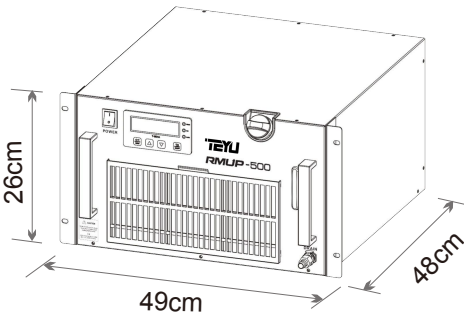
### RMUP-300



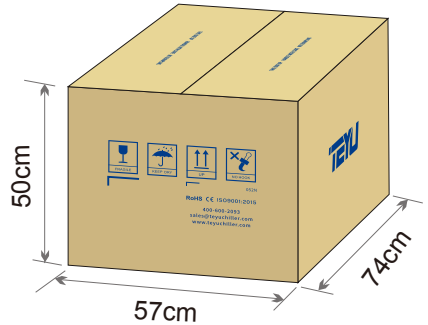
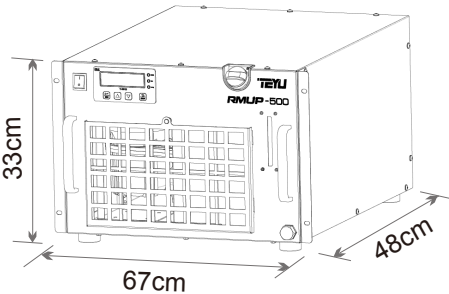
## Packing Dimension :



### RMUP-500



### RMUP-500P



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