

## COOLING SYSTEM DATASHEET

SOETECK · LIQUID COOLING &amp; CDUS

# Soetek In-Rack Liquid-to-Liquid CDU 50–80 kW

Rack-mounted liquid-to-liquid coolant distribution unit, 50 kW or 80 kW, for cold-plate cooled racks

SKU SY-CDU-RK

Soetek



COOLING CAPACITY

**up to 80 kW**HEAT EXCHANGE  
CAPACITY**SY-CDU-RK-50...**

MODELS

**SY-CDU-RK-50...**

PRICE

**On request****REQUEST A QUOTATION ONLINE**[serverinvest.com/product/soetek-rack-level-liquid-liquid-cooling-solution-in-...](https://serverinvest.com/product/soetek-rack-level-liquid-liquid-cooling-solution-in-...)

## 01 Product overview

The Soetec in-rack liquid-to-liquid CDU brings direct-to-chip cooling to individual racks. Installed inside the cabinet, it separates the facility water loop from the clean secondary loop that feeds the server cold plates, exchanging heat through an internal heat exchanger and circulating coolant to the rack manifold with its own pumps.

Two capacities are available. The SY-CDU-RK-50 transfers 50 kW and the SY-CDU-RK-80 transfers 80 kW, both in a compact rack-mounted chassis, with 19-inch and 21-inch size variants. On the primary side the units accept cooling water at a design 35/45 °C, which makes them compatible with dry coolers and other free-cooling sources. The secondary side circulates 25% ethylene glycol at a design 50/40 °C, with an adjustable supply range of 35–50 °C and available head of at least 120 kPa or 150 kPa respectively.

Typical deployments

Small and medium data centres adding liquid-cooled compute rack by rack

Edge sites where space is limited but GPU or CPU density is high

Pilot or phased AI deployments that need to scale cold-plate capacity one rack at a time

Key components such as pumps and sensors are designed with redundancy so a single failure does not interrupt cooling. Soetec specifies standard racks with this CDU for power densities from 50 kW to 200 kW. Because each rack carries its own CDU, there is no need for a central in-row unit or large secondary piping network, which simplifies retrofits in existing rooms.

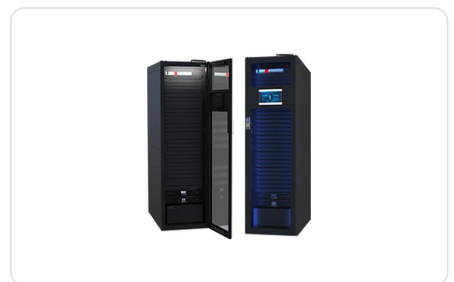
ServerInvest sizes, supplies and...

### KEY SPECIFICATIONS

|                                 |                                                             |
|---------------------------------|-------------------------------------------------------------|
| Models                          | SY-CDU-RK-50 · SY-CDU-RK-80                                 |
| Heat exchange capacity          | SY-CDU-RK-50: 50 kW · SY-CDU-RK-80: 80 kW                   |
| Rated power                     | SY-CDU-RK-50: 0.8 kW · SY-CDU-RK-80: 1.4 kW                 |
| Net weight                      | SY-CDU-RK-50: 75 kg · SY-CDU-RK-80: 85 kg                   |
| Dimensions                      | SY-CDU-RK-50: 450×850×175 mm · SY-CDU-RK-80: 536×900×175 mm |
| Rack compatibility              | 19-inch and 21-inch                                         |
| Supported rack density          | 50 kW – 200 kW                                              |
| Medium                          | Cooling water                                               |
| Design inlet/outlet temperature | 35/45 °C                                                    |
| Flow rate                       | SY-CDU-RK-50: 4.32 m³/h · SY-CDU-RK-80: 6.91 m³/h           |
| Connection size                 | SY-CDU-RK-50: φ31.8×1.5 mm · SY-CDU-RK-80: φ38.1×1.5 mm     |
| Pressure drop                   | ≤100 kPa                                                    |

### HIGHLIGHTS

- Two models: SY-CDU-RK-50 (50 kW) and SY-CDU-RK-80 (80 kW)
- Compact in-rack chassis in 19-inch and 21-inch sizes
- Supports racks from 50 kW to 200 kW power density
- Redundant pumps and sensors for continuous operation
- Secondary loop 25% ethylene glycol, 35–50 °C supply range
- Rated power only 0.8 kW / 1.4 kW



## 02 Full specifications

### GENERAL

|                        |                                                             |
|------------------------|-------------------------------------------------------------|
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### PRIMARY SIDE

|                                 |                                                                                                 |
|---------------------------------|-------------------------------------------------------------------------------------------------|
| Medium                          | Cooling water                                                                                   |
| Design inlet/outlet temperature | 35/45 °C                                                                                        |
| Flow rate                       | SY-CDU-RK-50: 4.32 m³/h · SY-CDU-RK-80: 6.91 m³/h                                               |
| Connection size                 | SY-CDU-RK-50: $\varnothing 31.8 \times 1.5$ mm · SY-CDU-RK-80: $\varnothing 38.1 \times 1.5$ mm |
| Pressure drop                   | ≤100 kPa                                                                                        |

### SECONDARY SIDE

|                                 |                                                                                                 |
|---------------------------------|-------------------------------------------------------------------------------------------------|
| Medium                          | 25% ethylene glycol                                                                             |
| Design inlet/outlet temperature | 50/40 °C                                                                                        |
| Supply temperature range        | 35–50 °C                                                                                        |
| Available head                  | SY-CDU-RK-50: ≥120 kPa · SY-CDU-RK-80: ≥150 kPa                                                 |
| Flow rate                       | SY-CDU-RK-50: 4.56 m³/h · SY-CDU-RK-80: 7.29 m³/h                                               |
| Connection size                 | SY-CDU-RK-50: $\varnothing 31.8 \times 1.5$ mm · SY-CDU-RK-80: $\varnothing 38.1 \times 1.5$ mm |

## 03 Engineered, delivered & supported by ServerInvest

### Engineering & sizing

Selected and sized against your real IT load, room and redundancy targets.

### Installation

Delivery, installation and commissioning by our engineers across Europe.

### Certified processes

ISO 9001, ISO 14001 and ISO 27001 certified project delivery.

### Service & support

Maintenance, spare parts and support from a single partner.



## Interested in this solution?

Request a quotation online or talk to a solutions engineer — we reply within one business day.  
[office@serverinvest.com](mailto:office@serverinvest.com)

