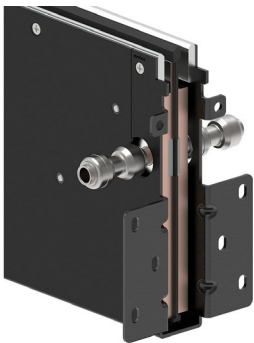


Liquid-Cooled Busbars >

As data centers move rapidly toward high rack power densities, increased heat generation is a major concern for thermal stability. Liquid-cooled busbar solutions integrate dedicated coolant channels directly into high-current busbar assemblies to efficiently dissipate heat and support power distribution in compact electrical systems. These busbars enable high continuous current ratings, making them ideal for data center power distribution, AI and graphics processing unit (GPU) servers.



ADVANTAGES AND FEATURES

Ensures compatibility with hyperscale standards while delivering the high current capacity required for AI and accelerator workloads

Molex liquid-cooled busbars are designed to OCP ORv3 mechanical standards, supporting currents up to 15.0kA; this reduces deployment risks and validation efforts.

Improves overall cooling efficiency and system reliability with effective heat removal and without overburdening rack level systems

A wide flow range (≈1 to 10 LPM) with <1 bar end-to-end pressure drop minimizes pumping power and operating cost while easing integration with facility cooling loops. This lower pressure drop across a wider operating range, compared to many liquid-cooled power solutions, simplifies cooling system design.

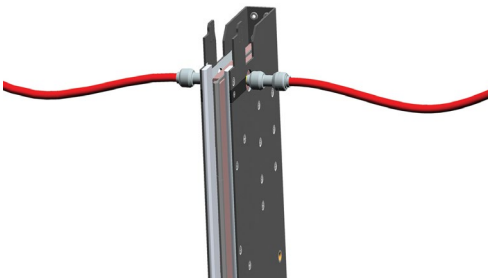
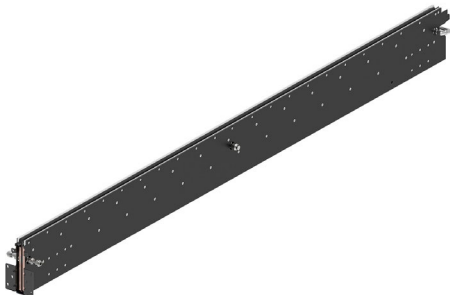
Industry Standards	OCP ORv3 High Power Rack
Current	Up to 15.0kA
Design Configuration	Custom
Coolant Compatibility	Dielectric and non dielectric liquids

Improves heat transfer efficiency at high current densities, maintaining stable electrical performance and reducing localized hot spots

These busbars have increased contact surface area via multi-channel cooling versus competitors’ single channel that limits heat removal efficiency at higher power levels.

Saves time and reduces costs by enabling phased deployment of liquid cooling

Replacing and swapping from air cooling to liquid cooling is easy with phased deployment of liquid cooling, eliminating the need to force immediate rack redesigns and supporting incremental adoption as power density increases.



Liquid-Cooled Busbars >

MARKETS AND APPLICATIONS

Networking

Networking and telecom equipment

Power for Data Centers

Power distribution equipment

Power supply and battery backup units

Server & Storage

AI and machine learning systems

AI/GPU servers

Hyperscale data centers

Open compute project

Server and storage systems



Telecom Equipment



Power Distribution Equipment



Networking and AI and Machine Learning Systems

SPECIFICATIONS

Reference Information

Packaging: Embossed tape with cover

Designed in: Millimeters

Product Type: Liquid-cooled power busbar

Mechanical Standard Alignment: HPR/ORV3 compatible

Electrical

Continuous Current Rating: Up to 15.0kA

Mechanical

Mechanical Standard: HPR/ORV3

Length and Depth Options: Custom

Inlet/Outlet Configuration: Single or multiple (configurable)

Physical

Cooling Method: Integrated liquid cooling

Coolant Compatibility: Dielectric and non dielectric liquids

Flow Rate Range: Approx. 10 LPM

Pressure Drop: <1 bar end to end

Cooling Channel Design: Multichannel