YOUR COMPLETE CONTROL PACKAGE FOR DATA CENTER COOLING

One PLC+HMI that handles control, communication, visualization, and monitoring. No gateways. No add-ons.

THE RIGHT DECISION WHEN TIME TO MARKET IS IMPORTANT

UniStream PLC + HMI is the best solution designed for your challenges

DMTF
Redfish

IPv6 READY

OPEN COMMUNITY

UNITRONICS®

WHAT MAKES IT DIFFERENT?

100% Control in One Box

- One single PLC handles **everything:** control, IOs, communication, visualization, diagnostics, and central monitoring.

- **No external gateways. No add-ons.**
No protocol converters. No custom development outside the controller.

Native Redfish + IPv6: The Only PLC Built This Way

- Our PLCs are OCP compliant, integrate **Redfish** and **IPv6 natively,** allowing direct connection to data center management and compliance with the data center network requirements.

- It comes **pre-licensed and pre-configured** with all required Data Center protocols, including **BACnet, Modbus, REST API, and OPC-UA.**

Mission–Critical Reliability: Built-In Multi master control strategy

- Built-in support for **N+1 and master-slave group functionality** ensures reliable operation and smooth failovers for continuous cooling.

Cybersecure & Remote Access Ready

- **Cybersecure:** Certified to **ISO 27001,** meeting crucial Data Center security requirements.

- **Remote Access, Built In:** Monitor and remotely control your cooling equipment from anywhere via the integrated Web Server and VNC.

Adapts to Every Cooling Approach

- A single PLC that adapts to **any** cooling loop architecture.

- **Rack mounted and cabinet mounted** configurations.

Partnership Built on Experience: We Know data center cooling

- **No Control or IT Know-How Needed:** We can provide the services to design your liquid cooling control and communication architecture, leveraging our deep experience to a successful implementation.

WHEN ONE PLC SOLUTION CONTROLS A DATA CENTER COOLING SYSTEM

A single UniStream Solution that manages everything.

PRODUCT CONFIGURATIONS

Each solution includes all the hardware and communication modules required to meet modern Data Center cooling requirements, **integrated and ready for deployment.**

DCB-CDU-US7-01 – UNISTREAM CDU US7 CONFIGURATION

Included Item	Description	Quantity
US7-B10-TA32	Main CDU controller with TA32 built-in I/O, B10 version	1
UAC-CX-01CAN	Enables group functionality over CAN network (N+1 or Master-Slave)	1
UAC-CX-01RS4	To support serial RS485 communication requirements with: 1. Modbus RTU devices (pumps, EC fans, VFDs) 2. SCADA/BMS monitoring 3. HVAC devices having BACnet MS/TP communication	2
640008114	16 GB UHS SD Card – mandatory for Redfish Events and Audit Trail	1

DCB-CDU-USC-01 – UNISTREAM CDU USC CONFIGURATION

Included Item	Description	Quantity
USC-B10-TA32	Main CDU controller with TA32 built-in I/O, B10 version	1
UAC-CB-01CAN	Enables group functionality over CAN network (N+1 or Master-Slave)	1
UAC-CB-01RS4	To support serial RS485 communication requirements with: 1. Modbus RTU devices (pumps, EC fans, VFDs) 2. SCADA/BMS monitoring 3. HVAC devices having BACnet MS/TP communication	2
640008114	16 GB UHS SD Card – mandatory for Redfish Events and Audit Trail	1
USL-070-B5	UniStream VNC panel for local or remote HMI access	1

Both configurations deliver the same connectivity and control performance — the difference is simply the physical form factor and installation method.

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SOFTWARE CONFIGURATION

Each UniStream solution comes pre-licensed with all required communication and integration protocols for Data Center cooling control — no add-ons or external gateways needed.

License	Function	Why It Matters
BACnet IP Server (ULC-BNET101)	Enable monitoring by a Building Management System	Allows monitoring by a higher-level building management system.
BACnet Client (ULC-BNET201)	Controls BACnet HVAC devices over MS/TP and IP	Provides direct interaction with pumps, valves, and other HVAC components.
IPv6 Protocol (ULC-IPV6101)	Adds IPv6 support	Meets **OCP mandatory IPv6** requirements for Data Centers.
Redfish Standard (ULC-RF101)	Enables communication with Data Center management systems	Allows CDU status, alarms, and performance data to be monitored via Redfish clients.

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