

# Optimize cooling distribution unit (CDU) performance with Endress+Hauser

## Benefits at a glance

- Global manufacturing strength delivers the same consistent, ISO 9001-level quality wherever our customers operate
- Multiple manufacturing locations provide the flexibility and capacity to help meet demanding delivery schedules and high-volume requirements
- Consistent manufacturing excellence helps ensure every device delivers the quality, accuracy and reliability customers expect
- Stocking programs and reservation agreements create greater supply certainty, helping keep critical projects moving
- A trusted global partner committed to delivery, reliability and long-term success

Learn more about how Endress+Hauser supports data center operations



## Endress+Hauser: A robust instrumentation provider for modern data centers

- Complete measurement coverage across the CDU
- Compact instrumentation for space-constrained skid designs
- Reliable flow, pressure, temperature and coolant-quality data
- Digital diagnostics that support proactive maintenance
- Scalable instrumentation for standardized CDU platforms

## Key technologies for cooling distribution units



Picomag

IO-Link



Proline Promag W 300 with OxDN

EtherNet/IP

### Compact electromagnetic flowmeters

- Monitor coolant flow through CDU and rack-level circuits
- Combine flow, temperature and conductivity measurement in one compact device
- Wired communication options for sensitive IT environments
- OxDN installation for tight piping layouts

Endress+Hauser 

People for Process Automation



Absolute  
and gauge  
pressure  
Cerabar  
PMC21



Differential  
pressure  
transmitter  
Deltabar  
PMD50



iTHERM  
Compact Line  
TM311  
compact  
thermometer  
 IO-Link



iTEMP TMT72  
temperature  
transmitter



4-channel  
transmitter  
Liquiline  
CM444



Digital  
4-electrode  
conductivity  
sensor  
Memosens  
CLS82E



Digital  
pH sensor  
Memosens  
CPS11E



Turbidity  
sensor  
Turbimax  
CUS52D

### Pressure and differential pressure measurement

- Maintain stable pressure across pumps, manifolds and cooling circuits
- Monitor differential pressure across heat exchangers and filters
- Identify restrictions, pressure loss and abnormal operating conditions
- Support efficient pump and valve control

### Temperature measurement

- Monitor CDU supply and return temperatures
- Calculate temperature differential across the cooling loop
- Detect thermal imbalance and changing heat-transfer performance
- Support consistent coolant delivery to high-density racks

### Coolant-quality monitoring

- Monitor conductivity, turbidity and pH
- Help identify coolant contamination and chemistry changes
- Reduce the risk of scaling, corrosion, fouling and blocked cooling channels
- Integrate multiple parameters through a common transmitter platform

### Digital diagnostics

- Enable continuous insight into instrument and process conditions
- Support condition-based and predictive maintenance
- Identify gradual changes before they affect cooling performance
- Simplify troubleshooting across repeatable CDU platforms

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