

High-Density Pod

A pod is a modular solution, containing high-density equipment, in an isolated, standardized and self-contained area. Row-based cooling provides superior air-flow management by eliminating air recirculation, which in return improves efficiency and predictability of the cooling system.



Point of Delivery (Pod)

MODULAR, HIGH-DENSITY DATACENTER

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PRODUCT DESCRIPTION

Eltek's Dynamic Pod is an innovative solution that provides complete environmental infrastructure enabling enterprises and service providers to build out conditioned and unconditioned compute facilities with speed and flexibility.



MODULAR INFRASTRUCTURE

The building blocks for the system include:

- Roll-up, integrated Equipment Cabinets – up to 12 cabinets (standard 42U racks)
- In-Row Coolers (99% heat exchange efficiency over wide utilization range)
- Power Tray (top) – power strips/PDUs with monitoring
- Fiber Tray (top) – for wire management
- Containment Lid with contracting panels for fire suppression
- Security locks on pod doors; cabinet door security options
- Pod monitoring
- Full turnkey solutions available
- 1 Hour fire rated enclosure with fire suppression (optional)

KEY FEATURES

- HOT AND COLD AISLE CONTAINMENTS FOR CONDITIONED AND UNCONDITIONED FACILITIES
- PRE-ENGINEERED CONFIGURATIONS WITH POWER AND COOLING TO SUPPORT HIGH PERFORMANCE COMPUTING DENSITY DEPLOYMENTS
- FLEXIBLE AND SCALABLE CONFIGURATION FOR QUICK AND EASY DEPLOYMENTS
- VARIABLE FLOW AND CAPACITY TO MATCH ALL LOAD CONFIGURATIONS
- STANDARDIZED DESIGN ELEMENTS
- SPEEDY DEPLOYMENT
- INDEPENDENT OF EXISTING INFRASTRUCTURE (ENSURING NO NEGATIVE IMPACT)
- EFFICIENT AND COST EFFECTIVE
- PREDICTABLE, RELIABLE PERFORMANCE

IN-ROW CHILLED WATER AIR HANDLER

Model	ACW-50
Input Power	208/240 VAC 60Hz 415 VAC 3-phase 380 VDC
Dimensions	36"w x 48"d x 79"h
Approximate Weight	895 lbs. (operating weight)
Construction	18 ga. skin, 14 ga. frame, steel; paint – powder-coated finish (Majestic Black, Desert White, or color to match)
Full Load Power	1 kW
Cooling Capacity	50 kW
Design Temperature Differential	20 Degrees
Fan Power Requirement	Max 1kW (Typical 0.6 kW)
Input Water Temperature	42-75 Degrees (F)
Air Flow	8000 CFM
Flow Control	Differential Pressure
CW Access	Top

POD CONTAINMENT

Mounting	Top of cabinets
Doors	Sliding doors on either end; locks optional
Cooling	Melt-away panels standard
Lighting	LED lighting overhead; built-into the containment ceiling grid
Cable Management	Cable fiber tray mounted to the top of the cabinets
*Containment is customizable to customer's equipment cabinets	

CONTROL AND MONITORING

- Local control at WDC and remote control via Wi-Fi communication to interface program on a computer or portable device
- Differential air pressure adjustment via the user interface
- Air temperature adjustment via the user interface
- Active dew point monitoring for latent losses/dehumidification
- Programmable Logic Controller (PLC) communications failure units 1-4
- Air high temp alarm (Supervisor and In-row)
- Discharge air out of specification (Supervisor and In-row)
- Low water temp alarm (Supervisor and In-row)
- Input / output air temp (Supervisor and In-row)
- EC fan failure (Supervisor and In-row)
- VFD trouble (Supervisor and In-row)
- Clogged filter (Supervisor and In-row)
- Unit percent load (Supervisor and In-row)
- Percent air flow (Supervisor and In-row)
- Water valve position (Supervisor and In-row)
- Pod differential pressure (Supervisor and In-row)
- Leak detection
- Pod load in kW demand and PUE

