



Technical specifications	SmartPod EVO800 OCP (ORv3 IT-ready) Dual CDU (CE&UL)
Version	SP_45800_DCE24 SP_45800_DUL24
Rack type	Tank
Solution type	Single phase
IT heat dissipation capacity ^{1, 4}	Up to 100 kW ^a or 50 kW ^a fully redundant Up to 140 kW ^b or 70 kW ^b fully redundant <i>a At specific conditions: SmartCoolant v3, water inlet 26°C, % ethyleneglycol 25%, water flow 9m3/h, setpoint 50°C</i> <i>b At specific conditions: SmartCoolant v3, water inlet 22°C, % ethyleneglycol 25%, water flow 9m3/h, setpoint 55°C</i>
IT capacity	390U (OCP)
IT hardware max depth	OCP std
SmartCoolant setpoint temp range in the IT Tank ¹	95 °F to 131 °F 35 °C to 55 °C
Minimum room height	9.2 ft 2.8 m
Tank dimensions (L x W x H)	89.8 x 38.1 x 47.6 in 228 x 96.9 x 121 cm Maximum height with lid open: 76.8 in 195 cm
Control box dimensions (L x W x H) [connectors included]	9.9 x 23.6 x 34.6 in 25.1 x 60 x 88 cm
In-tank CDU number	2
Pod weight empty	1763 lb 800 kg
Pod weight + SmartCoolant	3885 lb 1762 kg
Control box weight	106 lb 48 kg
Max SmartCoolant capacity	313.6 US gal 1187 L
Tank Footprint (L x W)	23.86 ft2 2.22 m2
Tank floor footprint (L x Wf)	15.41 ft2 1.43 m2
Operational footprint (L x W)	112 ft2 10.4 m2 (for one unit) 79.7 ft2 7.4 m2 (for a deploy setting)
Max floor load (considering IT HW 25 kg/U / 55.1 lb/U and 2.5L/U / 0.66 gal/U fluid displacement & Pod floor footprint)	388.7 lb/ ft2 1898 kg/m2 1.76 kN/ft2 19 kN/m2
Operation air temperature range	59 °F to 95 °F 15 °C to 35 °C
Thermal loss to environment	550 W ^c <i>c At specific conditions: setpoint 55°C, air temperature 28°C, with a closed lid</i>
Required air changes per hour (ACH)	0.55 ACH ^d <i>d Reference room: setpoint 55°C, 11 SmartPod EVO Dual, 1 MW project, room dimension 15x7.3x3 m</i>
Operation relative humidity range	H<=50% / For operating air <= 95 °F 35°C / and water inlet >= 75.2°F 24°C H<=90% / For operating air <= 68 °F 20°C / and water inlet >= 66.2°F 19°C
Storage air temperature range	-4 °F to 158 °F -20 °C to 70 °C

Altitude operation range	Up to 4593.2 ft 1400 m
Primary cooling technology	Integrated plates heat exchanger
Nominal power consumption	1.6 kW
Power consumption per kW IT	0.016 (50 kW ^a)
	0.011 (70 kW ^b)
Non-IT power overhead/tank footprint	56 W/ft² 600 W/m ²
Power supply	2x 3 Phase 400/230 Vac, 50 Hz (CE version) 2x 3 Phase 208/120 Vac, 60 Hz (UL version)
Power supply connection	Direct connection to terminal block 4 mm ² , 3P+E+N cable, 16A C-curve circuit breaker (CE & UL version)
Water supply quality specification	As per ASHRAE FWS
Water flow range per CDU ¹	min 22 US gpm to max 44 US gpm min 1.4 L/s to max 2.8 L/s
Water head loss in CDU ²	18.6 psi 1.3 bar @rated flow
Pressure drop - ASHRAE W32	5.8 psi 40 kPa (with 5 m ³ /h flowrate)
	18.9 psi 130 kPa (with 9 m ³ /h flowrate)
	23.2 psi 160 kPa (with 1.6 m ³ /h flowrate)
Water max pressure	116 psi 800 kPa
Water inlet temperature requirement ¹	min 64.4 °F to max 96.8 °F min 18 °C to max 36 °C
Water outlet temperature ³	Expected 9 °F 5 °C increase
Temperature delta rating range	87.8 °F max 31 °C (at 140 kW ^e)
	46.4 °F min 8 °C (at 20 kW)
<i>e Difference between coolant setpoint and cold water inlet, for the case of max and min kW, with SmartCoolant v3 and ethyleneglycol 25%.</i>	
Water supply connections (machine side)	4x Zero-leak quick water coupling G 1 1/4" BSPP female (CE version) 4x Zero-leak quick water coupling 1 1/4" NPT male (UL version)
Max noise level	30 dBA
Lid type	Opaque
Color	RAL 9005 Textured black
SmartPod Portal connection	Ethernet RJ45 100Mbps
SmartPod Portal connectivity protocols	API REST / SNMPv3
SmartPod Portal data monitoring	Temperature of SmartCoolant and water + system alerts
SmartPod Portal controls	Setpoint + System alerts setup

¹ Actual max. IT heat dissipation capacity and available coolant setpoint depend on the cooling water flow and inlet temperature. See Performance Charts for further information.

² Actual cooling water head loss depends on cooling water flow. See Performance Charts for further information.

³ Actual water outlet temperature depends on IT heat power and cooling water flow. See Performance Charts for further information.

⁴ The SmartPod can only be used with fluids validated by Submer after a thorough qualification process.

Disclaimer – We recommend testing any high-density system that is going to be deployed at scale with our Labs and Certification teams – This service will allow certifying not only the tank capabilities but also the IT and workload performance.