



## Technical specification

Transportable data centre in a container: fully self-contained, incorporating all racking, cooling, UPS power and full integration at N+1 redundancy



	module48-8 standard	module48-8 customised	module48-12 standard	module48-12 customised
<b>Summary</b>	ISO standard, 20' (≈ 6 m) high cube (HC) shipping container complying with all shipping regulations - 36 kW ICT load - 4 x ICT equipment racks - 4.5 kW per rack (at N+1 internal redundancy) - Power usage efficiency (PUE) = 1.31	ISO standard, 20' (≈ 6 m) HC shipping container complying with all shipping regulations  Infrastructure and configuration is customised based on end-user requirements	ISO standard, 40' (≈ 12 m) HC shipping container complying with all shipping regulations - 2 x 60 kW ICT load - 8 x ICT equipment racks - 7.7 kW per rack (at N+1 internal redundancy) - PUE = 1.30	ISO standard, 40' (≈ 12 m) HC shipping container complying with all shipping regulations  Infrastructure and configuration is customised based on end-user requirements
<b>Dimensions</b>	6.06 m (L) x 2.435 m (W) x 2.9 m (H)	6.06 m (L) x 2.435 m (W) x 2.9 m (H)	12.2 m (L) x 2.435 m (W) x 2.9 m (H)	12.2 m (L) x 2.435 m (W) x 2.9 m (H)
<b>Gross weight</b>	4,950 kg (with facility infrastructure) 5,950 kg (with ICT equipment)	4,950 kg (with facility infrastructure) Up to 6,700 kg (with ICT equipment)	7,906 kg (with facility infrastructure) 10,200 kg (with ICT equipment)	7,906 kg (with facility infrastructure) Up to 10,900 kg (with ICT equipment)
<b>Internal area</b>	13.7 m <sup>2</sup>	13.7 m <sup>2</sup>	28 m <sup>2</sup>	28 m <sup>2</sup>
<b>Volume</b>	36.9 m <sup>3</sup>	36.9 m <sup>3</sup>	76.2 m <sup>3</sup>	76.2 m <sup>3</sup>
<b>Minimum site area required / load rating</b>	9.0 m (L) x 4.9 m (W) x 4.0 m (H) [45 m <sup>2</sup> ] / 7.0 kPa live load	9.0 m (L) x 4.9 m (W) x 4.0 m (H) [45 m <sup>2</sup> ] / 7.0k Pa live load	14.5 m (L) x 4.9 m (W) x 4.0 m (H) [65.25 m <sup>2</sup> ] / 7.5 kPa live load	14.5 m (L) x 4.9 m (W) x 4.0 m (H) [65.25 m <sup>2</sup> ] / 7.5 kPa live load
<b>Mechanical cooling methodology</b>	Air displacement (DX) with free cooling and hybrid modes	Defined by user requirement	Air displacement (DX) with free cooling and hybrid modes	Defined by user requirement
<b>Mechanical heat rejection</b>	34.6 kW maximum sensible	Defined by user requirement	93 kW maximum sensible	Defined by user requirement
<b>ICT power load (maximum installed)</b>	36 kW	Defined by user requirement	120 kW	Defined by user requirement up to 32kW
<b>Input power circuit rating</b>	1 x 250 A 3 ph. 415 V OR 2 x 250 A 3ph. 415 V (if optional internal ATS is fitted)	Defined by user requirement	1 x 400 A 3 ph. 415 V OR 2 x 400 A 3 ph. 415 V (if optional internal ATS is fitted)	Defined by user requirement
<b>Input power connection</b>	250 A integral IP67 Decontactor Male Appliance Inlet to AS 3123 (unit comes with match plug for supply cable; to be terminated on site)	Defined by user requirement	1 or 2 no. 400 A integral IP67 Decontactor Male Appliance Inlet/s to AS 3123 (unit comes with match plug/s for supply cable; to be terminated on site)	Defined by user requirement
<b>Installed per-rack power density</b>	4.5 kW per rack (at N+1 redundancy)	Defined by user requirement	7.7 kW per rack (at N+1 redundancy)	Defined by user requirement
<b>Total space power density (kW/m<sup>2</sup>)</b>	Equivalent to 2.0 kW/m <sup>2</sup> [2010 W/m <sup>2</sup> ]	Defined by user requirement	Equivalent to 2.4 kW/m <sup>2</sup> [2410 W/m <sup>2</sup> ]	Defined by user requirement
<b>Thermal insulation</b>	ICT equipment pod on all sides = R3.6 (inflow)	R3.6 (inflow)	ICT equipment pod on all sides = R3.6 (inflow)	R3.6 (inflow)
<b>Equipment rack dimensions</b>	700 mm x 1075 mm (4 no.)	Defined by user requirement	800 mm x 1075 mm (1 no.) 600 mm x 1075 mm (7 no.)	Defined by user requirement
<b>Equipment rack units</b>	168 no. for ICT equipment	Defined by user requirement	336 no. for ICT equipment	Defined by user requirement
<b>Power usage efficiency (PUE)</b>	1.31 (at full load utilisation; 1.54 at 50%)	Defined by user requirement	1.30 (at full load utilisation; 1.50 at 50%)	Defined by user requirement
<b>Operating environment</b>				
<b>Outside ambient temperature</b>	-20 °C to +49 °C	-20 °C to +49 °C	-20 °C to +49 °C	-20 °C to +49 °C
<b>Outside relative humidity</b>	0-100% RH	0-100% RH	0-100% RH	0-100% RH
<b>Interior conditions</b>	18-27 °C, 20-80% RH	18-27 °C, 20-80% RH	18-27 °C, 20-80% RH	18-27 °C, 20-80% RH
<b>Internal conditions</b>	Based on ASHRAE 2011 TC9.9 standard	Based on ASHRAE 2011 TC9.9 standard	Based on ASHRAE 2011 TC9.9 standard	Based on ASHRAE 2011 TC9.9 standard