

DATA CENTER SERVERS

SOLUTION SHEET - VERSION 1

**NO WATER
NO RISK****HIGH HEAT
FLUX READY****EASY TO
ADOPT****FIT &
FORGET****100%
PASSIVE**

DESCRIPTION:

Our trusted flagship technology has long been deployed in server environments and more recently we have expanded into the telecommunications market. Calyos utilises standard components to build a solution specific to your mechanical design, with our inherent fit-and-forget reliability.

COMPONENTS:



TYPICAL APPLICATIONS:

Market Applications	Compute	Specialised Equipment
	CPU	Medical & Research
	GPU	AV Equipment
	ASIC	Production Equipment
	FPGA	

LHP-DCS: SOLUTION SHEET

STANDARDS:

CE Mark	Yes
ROHS V2 Compliant	Yes
UL Certification	Yes

OPERATING INFORMATION:

Operating Heat Source Temperature*	0 °C to +120 °C
Operating Cold Source Temperature*	-40 °C to +80 °C
Storage Temperature	-40 °C to +90 °C
MTBF	> 200,000 h

*For the system to operate, there must always be a temperature difference between the heat and cold sources.

SYSTEM:

Loop Heat Pipe Typical Thermal Resistance	0.05 K/W
Working Fluid	R1233zd(E) Methanol Others on request

EVAPORATOR(S):

Power per Component	< 800 W
Active Cooling Area*	Small: 50 x45 mm Large: 50 x 59mm
Max. Average Heat Flux	< 150 W/cm ²
Max. Temperature	< 120 °C
Number of Evaporators	< 6
Body	Stainless Steel
Baseplate	Copper
Entry & Exit Line	Stainless Steel
Thermal Interface Material	Recommended

*Can be customised if required.

LINES:

Fixed Line Material	Stainless Steel
Flexible Line Material	Stainless Steel
Line Bonding Method	Welded or Brazed

CONDENSER:

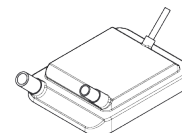
Type	Air Exchanger Fluid to Fluid Conductive Plate
Fans	Optional

EVAPORATOR EXAMPLES

High-Performance

*Picture
Coming
Soon*

Low-Profile



CONDENSER EXAMPLES

1U Half Width



2U



CUSTOMISATION

Calyos recognises the need for customisation. Reach out to us to discuss how we can adapt this solution to your specific needs.

GENERAL NOTE

Both the pictures and specification are indicative of a typical solution, exact design and specification will be according to your needs.