PRODUCT SPECIFICATION

Vapor Phase One »

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The Vapor Phase One offers development engineers as well as small to medium sized prototyping service providers one of the most gentle soldering processes in the industry. In contrast to infrared or convection processes, assemblies with high thermal mass, fine pitch structures or temperature-sensitive components can be processed without any problems.

FEATURES

Fast temperature profiles	Allows fast temperature profiles using a height-adjustable PCB lift.
Custom soldering profiles	Import individual soldering profiles via SD card to adapt heating power and lift position to different solder pastes and PCB technologies.
Quick cool	Powerful fans cool the process chamber quickly after the soldering process and ensure minimal loss of Galden®.
Anti Condensation	The assembly is kept at 120 °C while cooling down so that there will be hardly any Galden® residues on the PCB.
Lifting lid	The lid to the process chamber lifts automatically to simplify the insertion and removal of PCBs.
Viewing window	Lid comes with a viewing window and internal lighting that allow insights into the process chamber.
Safety	A variety of safety mechanisms are implemented in both hardware and software to ensure a secure usage and soldering process.
Open Source Hardware	Source code of firmware, schematics and construction files are open source and publicly available on GitHub: https://github.com/PCB-Arts/vaporphaseone.

SPECIFICATIONS

Dimensions	495 x 650 x 320 mm	**Maximum soldering area**	200 x 185 mm
Power consumption	max. 1100 W	**Tested heat-transfer media**	Galden® LS 230, XS 235 and HS 240
Voltage	115 / 230 VAC (60 / 50 Hz)		
Ambient temperature	+15 °C … +35 °C	**Volume of Galden**	500 - 1000 ml
Geographical altitude	max. 2000 m (above mean sea level)	**Volume of Galden used per cycle**	0.49 ml
Weight	22 kg	**Cooling**	Closed water cooling system with 4x 120 mm fans
Enclosure	Stainless steel	**Display**	4-inch capacitive touchscreen with 800 x 480 pixels
Data Interface	SD Card		