



# MSP Turbo™ Vaporizer

Model 2841PE



**MSP's 2841PE Turbo™ Vaporizer was designed for high flow microelectronic applications. It has the state-of-the-art Performance Enhanced (PE) atomizer with on-board flow control and dual heaters to compensate for evaporating cooling at high liquid flow.**

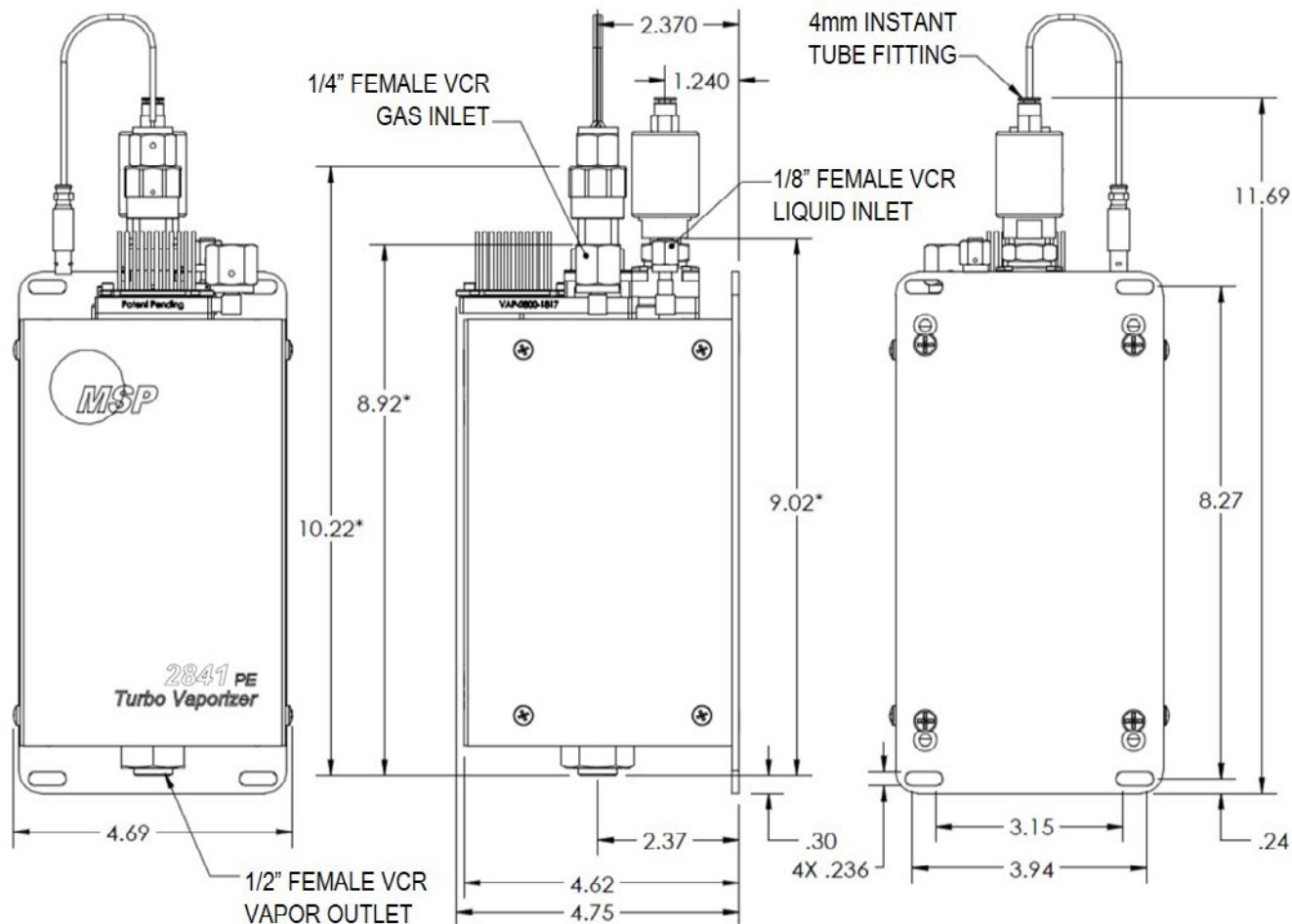
Dimensions	297 mm x 119 mm x 122 mm (11.7 inch x 4.7 inch x 4.8 inch)
Weight	7.2 kg (15.8 lb)
Fittings (on the unit)	
Carrier Gas Inlet	1/4 inch VCR female split nut
Liquid Inlet	1/8 inch VCR female
Vapor Outlet	1/2 inch VCR female
Compressed Air	4 mm instant tube fitting
Wetted Parts	SS 316, PEEK, PCTFE, Elgiloy®, FFKM, PTFE
Leak Integrity	$\leq 1 \times 10^{-9}$ Pa·m <sup>3</sup> /s Helium
Heater Power Requirements	120 V <sub>AC</sub> , 60 Hz, 500W
Carrier Gas	Inert gas recommended
Max Carrier Gas Flow <sup>1</sup>	7.0 standard liters/min N <sub>2</sub> at 80 psig 4.5 standard liters/min N <sub>2</sub> at 50 psig
Max Liquid Flow <sup>2</sup>	2,400 g/hr. (TEOS or equivalent) 240 g/hr. (H <sub>2</sub> O or equivalent)
System Pressure Limit	150 psig
Compressed Air	90 to 110 psig
Temperature Range	40° C to 160° C 160° C to 200° C with optional piezo cooling package
Temperature Sensor	2 type K thermocouples
Vaporizer Body	Vacuum tight chamber with multi-stage heat exchanger, SS 316 construction

<sup>1</sup> Max Carrier Gas Flow Rate is adjustable; visit [www.tsi.com/contact](http://www.tsi.com/contact) to request more information.

<sup>2</sup> Max. liquid flow is process dependent. The spec assumes a vaporizer temperature of 180° C or higher, N<sub>2</sub> carrier gas  $\geq 4.5$  SLPM, and pressure  $< 10$  Torr immediately downstream of the vaporizer.

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All specifications are subject to change without notification.

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