

# Specifications - Multidrop 384 / Titan Stacker

## For 96 well or 384 well plates

<b>Overall dimensions</b>	29 in (W) x 18 in (D) x 24 in (H) 74 cm (W) x 46 cm (D) x 61 cm (H)	
<b>Weight (total)</b>	<b>Instrument</b> 70 lbs. (32 kg)	<b>Dispensing cassette</b> 0.3 lbs. (124 g)
<b>Mains power supply</b>	100 - 120 VAC, 50/60 Hz, nominal (operating range 90 - 130 VAC) 200 - 240 VAC, 50/60 Hz, nominal (operating range 180 - 256 VAC)	
<b>Power consumption</b>	345 VA (measured @ 230 V/ 50 Hz)	
<b>Fuses</b>	<b>Multidrop:</b> 2 x 300 mA for 200 - 240 V, UL 198G Time Delay, 5 x 20 mm 2 x 600 mA for 100 - 120 V, UL 198G Time Delay, 5 x 20 mm <b>Titan Stacker:</b> Slow-blow 3 amp for 115 V Slow-blow 1.5 amp for 230 V	
<b>Operating conditions (Indoor use)</b>	+10°C - +40°C (tested according to IEC 68-2-1, test Ab, cold, IEC 68-2-2, test Bb, dry heat and IEC 68-2-3, test Ca, RH 80 %, damp heat, steady state)	
<b>Transportation conditions</b>	-40°C - +70°C (tested according to IEC 68-2-1, test Ab, cold test and IEC 68-2-2, test Bb, dry heat), packed in transport packaging.	
<b>Storage conditions</b>	-25°C - +50°C, packed in transport packaging.	
<b>Autoclaving conditions of the dispensing cassette</b>	Pressure: 1 bar Temperature: 121°C Time: 20 min Autoclaving: 50 times	
<b>Control panel</b>	<b>Multidrop</b> Keys: Start, Prime/Drop, Empty, Step, Stop Selection switches: Plate (= 96/384), Volume µl, Col (= column) <b>Titan Stacker:</b> Keys: Start, Stop, Restack	
<b>Interface</b>	Serial RS-232C	
	384-well plate dispensing	96-well plate dispensing
<b>Dispensing volume</b>	5 µl to 100 µl in 5 µl increments	5 µl to 395 µl in 5 µl increments
<b>Multidrop 384 Dispensing speed</b>	20 sec / 20 µl into 384 wells	5 sec / 20 µl into 96 wells
	25 sec / 50 µl into 384 wells	8 sec / 50 µl into 96 wells
<b>Multidrop 384 / Titan Throughput</b>	25 µl into 384 wells 116 plates per hour	50 µl into 96 wells 163 plates per hour
<b>Dispensing accuracy</b>	± 3% @ 5 µl (Typical) ± 2% @ 20 µl (Typical) ± 1% @ 100 µl (Typical)	
<b>Dispensing precision</b>	CV ≤ 10% @ 5 µl (Typical) CV ≤ 1.5% @ 20 µl (Typical) CV ≤ 1% @ 100 µl (Typical)	
<b>Dead Volume</b>	< 7 ml	