

dispensman®

PICO

Non-contact delivery of sub-microliter volumes to 96-well plates without using tips



SPEC SHEET | LIQUID HANDLING

DISPENSAN® PICO DIGITAL DISPENSER

| Cost-Effective

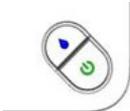
| Easy to Use

| Flexible

The cost-effective DISPENSAN® pico digital dispenser provides non-contact delivery of sub-microliter volumes to 96-well plates without using tips. The 4-channel digital dispenser can deliver solutions in Dimethyl Sulfoxide (DMSO) or aqueous buffers containing surfactants.



TECHNICAL SPECIFICATIONS - DISPENSAN® PICO

Specification	Definition	
Communication	USB type-B	
Microplate Type	96-well shallow microplate or qPCR plate Maximum microplate height is 17.5 mm	
Dimensions (W x D x H)	20 x 16 x 11 cm (8 x 6 x 4 in)	
Front Panel	Two LEDs on two buttons: Power ON (GREEN) or Error (Red) Change Cartridge (Blue) - The cartridge holder is moved to the replacement position or home position by pressing the button.	
		
Drop Placement Accuracy	X +/-0.5 mm, Y +/-0.5 mm at Z-gap = 3 mm Microplate dimensional tolerances not included	
Liquid Contact Materials	Description	Material
	Maintenance Unit	Polyoxymethylene
	Tray Unit	Polyoxymethylene
	Cartridge	Cyclic olefin copolymer EMS 332-5-275 (epoxy) Si, SiO2 (ejector chip) Ta (ejector heater) NR-2500 (fluid channels) DF-4000 (nozzle plate)

Specification	Defintion														
Dispense Height (Z-Gap)	<p>When dispensing, the shortest distance between the channels and the plate will provide the best results.</p> <p>Ensure that the height of your plate (with an adapter, if necessary), is at least 17 mm and no greater than 17.5 mm.</p> <p><i>If the microplate being used is not within this specification, use a plate adapter. Plate adapters are commercially available.</i></p>														
Environmental Conditions	<table border="1"> <thead> <tr> <th>Specification</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>Environment</td> <td>Indoor use only</td> </tr> <tr> <td>Altitude</td> <td>Up to 2000 m</td> </tr> <tr> <td>Operating Temperature Range</td> <td>5°C to 35°C</td> </tr> <tr> <td>Humidity</td> <td>10% to 80% RH (non-condensing)</td> </tr> <tr> <td>Storage Temperature</td> <td>-20°C to 60°C</td> </tr> <tr> <td>Pollution Degree</td> <td>Degree 2 (normally only nonconductive pollution occurs, temporary conductivity caused by condensation is to be expected)</td> </tr> </tbody> </table>	Specification	Definition	Environment	Indoor use only	Altitude	Up to 2000 m	Operating Temperature Range	5°C to 35°C	Humidity	10% to 80% RH (non-condensing)	Storage Temperature	-20°C to 60°C	Pollution Degree	Degree 2 (normally only nonconductive pollution occurs, temporary conductivity caused by condensation is to be expected)
	Specification	Definition													
	Environment	Indoor use only													
	Altitude	Up to 2000 m													
	Operating Temperature Range	5°C to 35°C													
	Humidity	10% to 80% RH (non-condensing)													
Storage Temperature	-20°C to 60°C														
Pollution Degree	Degree 2 (normally only nonconductive pollution occurs, temporary conductivity caused by condensation is to be expected)														
Throughput	Dispenses 1 µL of aqueous with surfactant into a 96-well plate in less than two minutes using two channels														
Volume Range (Theoretical)	10.5 pL–2 µL DMSO 24 pL–2 µL Aqueous with surfactant														
Volume Precision*	DMSO and Aqueous with surfactant 10 nL–1 µL CV ≤8%														
Power Requirements	DISPENSMAN pico Input 24V DC, 0.71 A AC Adapter Input 100–240V, 50/60 Hz, 0.6 A Output 24V DC, 0.71 A														
Safety and Compliance	The instrument has been certified to safety standards specified for Europe and the United States. Refer to the instrument rear panel label and the Declaration of Conformity document for the current standards to which the instrument has been found compliant.														
Weight	1.3 kg (3 lbs)														