

SIDEPAK™ SP730 Personal Sampling Pump

The SIDEPAK Model SP730 personal sampling pump offers integrated internal low-flow bypass for precise low-flow control and measurement. The advanced internal flowmeter continuously integrates and controls flowrate over time for precise sample flowrate and volume measurement. The SIDEPAK SP730 pump also features multi-mode operation, data logging and precise run time information in minutes remaining.



Specifications

Flow Range		User Adjustable Values	Sample Run Time	Delayed Start
Constant Flow†	800 to 3,000 cc/min		Total Sample Volume	Key Pad Lock
Integrated Bypass			Flow Setpoint	Run Program
Position#1	200 to 1,000 cc/min		Time/Date	
Position#2	175 to 350 cc/min	Recorded Values	Start Date/Time	Logged
Position#3	75 to 250 cc/min		Stop Date/Time	Flow Rate
Position#3	20 to 175 cc/min (with fine control adj.)		Total Sample Time	Temperature
			Total Volume Sampled	Pressure
Flow Control		Temperature Range		
Hybrid Control	Thin-film flowmeter and back EMF ±3% of constant flow setpoint	Operating Range	0 to 45°C (32 to 112°F)	
		Storage Range	-20 to 60°C (-4 to 140°F)	
Thin-Film Flowmeter		Physical		
Flow Range	50 to 3,000 cc/min	External Dimensions	106 mm × 92 mm × 70 mm (4.2 in. × 3.7 in. × 2.8 in.) with 801723, 801724 or 801729 battery	
Flow Resolution	1 cc/min		130 mm × 92 mm × 70 mm (5.1 in. × 3.7 in. × 2.8 in.) with 801708, 801722, 801728 or 801736 battery	
Operating Pressure Range	12 to 17 psia	Weight	0.46 kg (16 oz) with 801723, 801724 or 801729 battery	
Operating Temp. Range	0 to 45°C (32 to 112°F)		0.54 kg (19 oz) with 801708, 801722, 801728 or 801736 battery	
Flow Performance	<1,000 cc/min @ NA in. H ₂ O	Display	2 line × 12 character LCD	
Flow vs. Max.	1,000 cc/min @ 37 in. H ₂ O	Tripod Socket	1/4–20 female thread	
Vacuum Pressure	1,500 cc/min @ 27 in. H ₂ O	Power Supply/Charger (P/N 2613210)		
	2,000 cc/min @ 19 in. H ₂ O	Input Voltage Range	100 to 240 VAC, 50 to 60 Hz	
	2,500 cc/min @ 11 in. H ₂ O	Output Voltage	9 VDC @ 1.0 A	
	2,950 cc/min @ 0 in. H ₂ O			
Flow Fault	If flow is blocked and drops by more than 3% for more than 20 seconds, the pump stops and retains all sample data. Auto-restart is attempted after 40 seconds up to 10 times.			
Flow Indicator	Adjust Flow Menu Screen, range 20 to 3,000 cc/min			
LCD				
Inlet Pulsation Ratio	4% @ 2.0 lpm w/GF filter			
Data Logging				
Data Points	Approx. 31,000 data points			
Logging Interval	Non-adjustable, 1-minute only			



Battery Information

Battery Option	Charge Time*	Safety Rated
1600 mAH NiMH Pack (P/N 801723)	3.0 hours	Yes**
1650 mAH NiMH Pack (P/N 801724 or 801729)	3.5 hours	Yes**
2700 mAH NiMH Pack (P/N 801722 or 801728)	5.5 hours	Yes**
6-Cell AA-size Pack (P/N 801708 or 801736)	N/A	No

Battery Level Indicator

The Smart Battery Management System™ utilizes a built-in “gauge” in the SIDEPAK battery packs. The gauge monitors battery capacity and calculates run time information by dividing capacity of the battery (mAH) by the instantaneous current consumed by the instrument (mA). This calculation is correct for current operating conditions and can change due to current (mA) consumption or changes in battery capacity.

Battery Life Performance (estimated hours)

Battery Option	Back Pressure (inches H ₂ O)	Flow Rate cc/minute (Constant Flow Mode)			
		1000	2000	2500	3000
1600 mAH	5	12.5	11.5	11	10.5
	10	10.5	9	8.5	NA
	15	9.5	8.5	7.5	NA
1650 mAH	5	13	12	11.5	11
	10	11	9.5	9	NA
	15	10	9	8	NA
2700 mAH	5	23	20.5	18	17.5
	10	17.5	16.5	15	NA
	15	14.5	13	12.5	NA
AA-size battery pack***	5	35	31	28.5	27
	10	25.5	24	21.5	NA
	15	23.5	21.5	20.5	NA

Maintenance

User flow calibrations: Before and after each use

Software/Hardware Specifications

Communications Interface

Type	USB 1.1
Connector, Instrument	USB Mini-B (socket)

Minimum Computer Requirements for TRAKPRO™ Software

Communications Port	Universal Serial Bus (USB) v 1.1 or higher
Operating System	Microsoft Windows® 98, ME, 2000, XP (USB not supported in Windows® 95 or NT)

Typical Collection Media Back Pressures

Typical Collection Media	Flow Rate cc/minute (Constant Flow Mode)			
	1000	2000	3000	4000
13 mm GF	8.25	17.25	27.2	37.3
13 mm PTFE, 1.0 μ	7.0	16.0	30.0	40.0
25 mm GF	1.75	3.75	5.25	9.2
25 mm PVC, 0.5 μ	1.0	2.25	5.75	8.0
25 mm MCE, 0.8 μ	1.0	2.75	5.0	7.5
37 mm GF	1.6	3.2	4.75	6.5
37 mm Cellulose	2.0	4.3	6.75	9.25
37 mm Quartz	1.5	2.75	4.0	5.5
37 mm PVC, 0.5 μ	0.6	1.4	2.25	3.0
37 mm PTFE, 2.0 μ	1.0	2.0	3.5	4.75
37 mm MCE, 0.8 μ	2.0	4.25	7.0	10.5
37 mm MCE, 0.45 μ	3.0	6.0	9.0	12.5

Approvals

Intrinsic Safety Rating Information**

TSI Battery Pack P/Ns: 801722, 801724, 801728 or 801729
INTRINSICALLY SAFE CSA

Exia

Class I Groups A, B, C, D

Class II Groups E, F, G

Class III

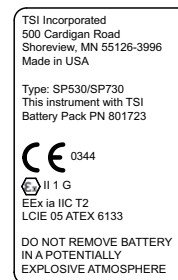
T2A with 801724 or 801729

T2C with 801722 or 801728

File: 200507

TSI Battery Pack P/Ns: 801708 or 801736

NOT INTRINSICALLY SAFE



CE 0344

Immunity EN61326-1:1997 + A11998 Clause 6
Emissions EN61326:1997 + Amendment A1:1998

† Requires Low Flow Adapter. ** All dust plugs and dust gaskets must be installed.
* Of a fully depleted battery. *** Using Energizer AA-size, E91 alkaline batteries.

Specifications are subject to change without notice.

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TSI Incorporated

Corporate Headquarters—Tel: 651 490 2811 Toll Free: 1 800 874 2811 Fax: 651 490 3824 E-mail: info@tsi.com
TSI China—Tel: +86 10 8260 1595 Fax: +86 10 8260 1597 E-mail: tsibeijing@tsi.com

Contact TSI or visit www.tsi.com for information on specific office locations worldwide.

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