



Features and Benefits

- TSI's Smart Battery Management System for precise run time information in minutes remaining
- Multiple battery options including 1650 mAh, 2700 mAh NiMH battery packs or a 6-cell, AA-size battery pack
- Pre-program sample time and delay start
- Built-in run time clock provides sample time information
- Flow block detection with auto-restart
- Sampling accessories and replacement parts available
- Intrinsically safe (CSA and ATEX approval) for use in hazardous environments (see model and battery specific information)
- Available in single-, 3-, and 5-unit kits

SIDEPAK™ Personal Sampling Pump Model SP330

For industrial hygienists and safety professionals who do workplace exposure sampling, the SIDEPAK™ Model SP330 personal sampling pump offers high performance battery options. Unlike conventional pumps, this pump offers a choice of long-running NiMH or alkaline battery packs and provide precise run time information in minutes remaining.

Applications

- Personal exposure monitoring/IH studies
- Ambient/work area monitoring
- Environmental sampling
- Epidemiology health studies
- Engineering studies





Specifications

Model SP330

SIDEPAK™ Personal Sampling Pump

Flow Range

Constant Flow 500 to 3,000 cc/min
Constant Pressure† 20 to 800 cc/min

Flow Control

Back EMF ±5% of constant flow setpoint

Flow Performance

500 cc/min @ NA in. H₂O

Flow vs. Max.

1,000 cc/min @ 55 in. H₂O

Vacuum Pressure

1,500 cc/min @ 40 in. H₂O

2,000 cc/min @ 28 in. H₂O

2,500 cc/min @ 19 in. H₂O

3,000 cc/min @ 10 in. H₂O

3,250 cc/min @ 5 in. H₂O

3,500 cc/min @ 0 in. H₂O

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 LCD

Adjust Flow Menu Screen, range 0.0 to 99.9%

Inlet Pulsation Ratio

8% @ 2.0 L/min w/GF filter

User Adjustable Values

Sample Run Time, Flow Setpoint, Run Program, Delayed Start, Key Pad Lock,

Recorded Values

Total Sample Time

Temperature Range

Operating Range

0 to 45°C (32 to 112°F)

Storage Range

-20 to 60°C (-4 to 140°F)

Physical

External Dimensions

106 x 92 x 70 mm (4.2 x 3.7 x 2.8 in.)
with 801723, 801724 or 801729 battery
130 x 92 x 70 mm (5.1 x 3.7 x 2.8 in.)
with 801708, 801722, 801728, 801735,
or 801736 battery

Weight

0.46 kg (16 oz) with 801723, 801724
or 801729 battery

0.54 kg (19 oz) with 801708, 801722,
801728, 801735, or 801736 battery

Display

Tripod Socket

2 line x 12 character LCD

1/4–20 female thread

Power Supply/Charger (P/N 2613210)

Input Voltage Range

100 to 240 VAC, 50 to 60 Hz

Output Voltage

9 VDC @ 1.0 A

Maintenance

User Flow Calibrations

Before and after each use

†Requires Low Flow Adapter.

Battery Information

Battery Option	Charge Time*	Intrinsic Safety Rating
1600 mAH NiMH Pack (P/N 801723)	3.0 hours	ATEX**
1650 mAH NiMH Pack (P/N 801724 or 801729)	3.5 hours	CSA** ATEX**
2700 mAH NiMH Pack (P/N 801722 or 801728)	5.5 hours	CSA** ATEX**
2700 mAH NiMH Pack (P/N 801735)	5.5 hours	No
6-Cell AA-size Pack*** (P/N 801708 or 801736)	N/A	No

*Of a fully depleted battery

**All dust plugs and dust gaskets must be installed.

***Using Energizer AA-size, E91 alkaline batteries.

Battery Level Indicator

The Smart Battery Management System™ technology 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	N/A
	15	9.5	8.5	7.5	N/A
1650 mAH	5	13	12	11.5	11
	10	11	9.5	9	N/A
	15	10	9	8	N/A
2700 mAH	5	23	20.5	18	17.5
	10	17.5	16.5	15	N/A
	15	14.5	13	12.5	N/A
AA-size battery pack***	5	35	31	28.5	27
	10	25.5	24	21.5	N/A
	15	23.5	21.5	20.5	N/A

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Typical Collection Media Back Pressure

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

*Of a fully depleted battery

**All dust plugs and dust gaskets must be installed.

***Using Energizer AA-size, E91 alkaline batteries.

Approvals

Intrinsic Safety Rating Information

(all dust plugs and dust gaskets must be installed)

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



CE 0344

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



Exposure Monitoring



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