

Gilian[®] Power Series Pumps









High Efficiency Air Sampling Pumps

The Gilian Power Series pumps are the industry leader in back-pressure performance, reliability, and easeof-use. Thanks to several advanced features, the pumps overcome the main causes of sampling errors — saving you time and money. The back-pressure capabilities of the Gilian Power Series pumps are the highest in the industry for any personal sampling pump.

- Highest back-pressure capability
- Programmable
- Live flow display
- NiMH battery

	Gilian 800i	Gilian 5000	Gilian 10i	Gilian 12
Total Flow Range	200 - 800 cc/min	20-5,000 cc/min	4000 - 10,000 cc/min	4000 - 12,000 cc/min
High Flow Range, Constant Flow	200 - 800 cc/min 0.2-0.8LPM	800-5000 cc/min 0.8-5LPM	4000-10,000 cc/min 4-10.0 LPM	4000-12,000 cc/min 4-12.0 LPM
High Flow Range, Constant Pressure	NA	NA	NA	NA
Low Flow Range, Constant Flow	NA	NA	NA	NA
Low Flow Range, Constant Pressure	NA	20-800 cc/min, @ 15" ± 1.5" H ₂ O* (3.7 ± 0.4 kPa)	NA	NA
QuadMode ^{s™} Capable	No	No	No	No
Data Shown In Display	Live Flow Rate, Total Sample Time, Total Volume Sampled, Low Battery	Live Flow Rate, Total Sample Time, Total Volume Sampled, Low Battery	Live Flow Rate, Total Sample Time, Total Volume Sampled, Low Battery	Live Flow Rate, Total Sample Time, Total Volume Sampled, Low Battery
Overall Dimensions: inches centimeters	3.2W × 5.4H × 2.3D 8.2W × 13.7H × 5.8D	3.2W × 5.4H × 2.3D 8.2W × 12.4H × 5.1D	3.2W × 5.4H × 2.3D 8.2W × 13.7H × 5.8D	3.2W × 5.4H × 2.3D 8.2W × 13.7H × 5.8D
Total Pump Weight	20.5 oz. (0.58 kg)	20.5 oz. (0.58 kg)	23.0 oz. (0.65 kg)	25.5 oz. (0.73 kg)
Rechargeable Battery	NiMH	7.2V, NiMH	7.2V, NiMH	9.6V, NiMH
Operating Tempera- ture	32°F to 113°F 0°C to 45°C	32°F to113°F 0°C to 45°C	32°F to113°F 0°C to 45°C	32°F to113°F 0°C to 45°C
Certifications EN 1232 Compliant Intrinsic Safety US/Canada NRTL (FM) ATEX CE Applicable Directives	Type G Yes Class I Div 1 Group A,B,C,D Class II Div 1 Group E,F,G Class III T4 Ex II 1 G, Ex ia IIC T4 ATEX 94/9/EC EMC 2004/108/EC (RFI) LVD 2006/95/EC	Type P Yes Class I Div 1 Group A,B,C,D Class II Div 1 Group E,F,G Class III T4 Ex II 1 G, Ex ia IIC T4 ATEX 94/9/EC EMC 2004/108/EC (RFI) LVD 2006/95/EC	NA Yes Class I Div 1 Group A,B,C,D Class II Div 1 Group E,F,G Class III T4 Ex II 1 G, Ex ia IIC T4 ATEX 94/9/EC EMC 2004/108/EC (RFI) LVD 2006/95/EC	NA NO NA NA NA NA EN 55011:1998/ A1:1999 Group 1 Class B
Charging Time	< 4 hours	< 4 hours	< 4 hours	< 4 hours

^{*} Requires installation of low flow constant pressure adaptor.

Power = Higher flow rates & higher back-pressure

The Gilian Power Series is the industry leader in back-pressure performance, reliability, and ease-of-use. The Gilian Power Series consists of four pumps:

Gilian 800i: Flow rates—200 to 800 cc/min

Gilian 5000: Flow rates—800 to 5,000 cc/min

Gilian 10i: Flow rates—4,000 to 10,000 cc/min

Gilian 12: Flow rates—4,000 to 12,000 cc/min

Backpressure up to 80" of H₂O @ 800 cc/min

Backpressure up to 70" of H₂O @ 1 LPM

Backpressure up to 45" of H₂O @ 4 LPM

Backpressure up to 67" of H₂O @ 4 LPM

The Gilian Power Series Pumps offers significantly higher back-pressure capabilities than competitive pumps thanks to an advanced pneumatic design and powerful batteries. As a result, dense -particulate buildup on the filter, common in dusty environments, is far less likely to trigger premature pump shutdown and an incomplete sample. In addition, several advanced features on these pumps overcome the main causes of sampling errors.

They also provide automatic constant flow controls and the Gilian 5000 has an optional adapter module which can handle lower flows under constant pressure control, such as required for multi-flow sorbent sampling.



^{**} Battery Life estimates based on proper battery maintenance.

[†] Back-pressure limit before fault with fully charged battery pack.

^{††} Maximum back-pressure for 8-hour run without fault.



Easy to calibrate and set-up

Air flow settings and calibration of the flow rate display are done through the keypad, requiring only an air flow calibrator. This means you can

set up your pump and begin sampling quickly. The pump performs an automatic selfcalibration of internal temperature and pressure measurement when initially placed in the run mode and whenever the ambient temperature changes by more than 3° C during sampling. The Power Series Pumps will hold calibration for 30 days, even with atmospheric changes.

RUN TIME

Live flow display confirms proper pump operation

Monitoring the pump for proper operation is easy. A large digital display continuously cycles to show flow rate, sample run time and

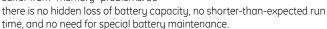
The display auto-cycles through three screens when the unit is on.

total volume sampled. You receive immediate, real-time feedback, including live flow, not just the flow setting, which quickly alerts you to any sudden changes in flow rate. The air flow display holds calibration for 30 days, even with atmospheric changes.

Pump wearers can stop the pump, such as for a break, and the display remains active. After 75 minutes, the pump automatically turns off the display if there's no activity but retains all sample data.

NiMH battery ends "memory" problems

With the Gilian® Power Series pumps there is less risk of lost samples due to battery failure. They incorporate a nickel-metal hydride (NiMH) battery which, unlike a NiCd battery, doesn't suffer from "memory" problems. So







TOTAL VOLUME SAMPLED

Advantages of NiMH batteries

When the display indicates a "full" battery, that's exactly what the pump delivers. Plus, the indicator more accurately displays remaining life throughout the sampling period. You receive faster charging too. The NiMH battery fully charges in just five hours. And you won't be hampered with special storage or disposal requirements, since the NiMH battery is friendly to the environment.

Programmable automatic restart when faults occur

The Gilian Power Series pumps have an intuitive automatic restart feature that will attempt to save a sample should a fault occur. If the filter becomes clogged or tubing pinches not allowing air to pass, the pump will shut down and attempt to restart every 3 minutes for up to 30 minutes. This can be disabled, if needed, for specific applications.

Four-button design—easy to understand and operate

The Gilian Power Series pumps are easy to understand and configure, four keys control everything. There are no codes to enter or difficult key sequences to remember. Operation is simple, intuitive, and less prone to error. To secure your settings from tampering, the pumps have a lockable keypad after setup and calibration.

Programmable

PROG

CCIMIN

The Gilian Power Series pumps are programmable for automatic start, pause, and stop, with a pre-set flow rate. The program mode is easily

accessible through the keypad. The format allows users to enter desired flow rate, a delayed start time, and up to four run times with pauses (hold times) in between. This allows, for example, an eight-hour sample that pauses for the lunch hour and coffee breaks. In the same program intermittent sampling is possible, starting the pump to sample a fraction of each hour in the day and spreading

an area sample over four days. This is done by choosing a run time of five minutes, a delay of 55 minutes and setting the number of repeated cycles at 96 (i.e., 4 days \times 24 hours).

Products	Gilian 800i	Gilian 5000	Gilian 10i	Gilian 12
Pump Only	810-1301-01	810-0801-01	_	_
Starter Kit, with Charger, US Cord	910-1301-US	910-0802-01	910-1501-US	910-1601-US
Starter Kit, with Charger, EU Cord	910-1301-EU	910-0802-02	910-1501-EU	910-1601-EU
Starter Kit, with Charger, UK Cord	910-1301-UK	910-0802-03	910-1501-UK	910-1601-UK
Starter Kit, with Charger, No Cord	_	910-0802-04	_	910-1601-NO
5-Pack Kit, with Power Station, US Cord	910-1305-US	910-0801-01	910-1505-US	910-1605-US
5-Pack Kit, with Power Station, EU Cord	910-1305-EU	910-0801-02	910-1505-EU	910-1605-EU
5-Pack Kit, with Power Station, UK Cord	910-1305-UK	910-0801-03	910-1505-UK	910-1605-UK
5-Pack Kit, with Power Station, No Cord	_	910-0801-04	_	910-1605-NO
Single Station Charger, US Cord	811-0802-01	811-0802-01	811-0802-01	811-0802-01
Single Station Charger, EU Cord	811-0802-02	811-0802-02	811-0802-02	811-0802-02
Single Station Charger, UK Cord	811-0802-03	811-0802-03	811-0802-03	811-0802-03
Single Station Charger, No Cord	298-0013-01	298-0013-01	298-0013-01	298-0013-01
5-Unit Power Station, US Cord	811-0801-01	811-0801-01	811-0801-01	811-0801-01
5-Unit Power Station, EU Cord	811-0801-02	811-0801-02	811-0801-02	811-0801-02
5-Unit Power Station, UK Cord	811-0801-03	811-0801-03	811-0801-03	811-0801-03
5-Unit Power Station, No Cord	811-0801-04	811-0801-04	811-0801-04	811-0801-04
Battery Pack	783-0007-01	783-0007-01	783-0007-01	783-0018-01
Battery Charger Cover	202783	202783	202783	_

