



**GENERAL MONITORS**  
Protection for life.

# MODEL SM100

## Sampling Pump Module



### Features

- Simple, rugged design
- 0.5 - 1 LPM sample gas throughput
- Low flow indicator
- Trouble relay

### Benefits

- Suited for combustibile and toxic gases
- Supplies gas for up to three gas detectors
- Informs end user if flow is insufficient for gas detection
- Provides local trouble signal indication

### Description

The SM100 is a pump system used to draw gas from a monitored area to a gas detector. By means of a sample line it can monitor areas that are far from the gas detector, inaccessible, or too cold, hot, or wet for direct monitoring. A sampling pump can supply gas for up to three gas detectors, a particularly useful feature when monitoring multiple unique gases in a single line.

The SM100 is available in two configurations, an aspirated model that is used with a compressed air source and a DC pump module. Both are fabricated from 316-stainless steel and designed to draw sample gas at a nominal flow rate of 1 LPM.

### Applications

- Aluminum smelting
- Emissions monitoring of soil samples
- Landfill gas monitoring
- Printing
- Wastewater treatment



# MODEL SM100

## Aspirated Model Specifications

**Aspirator Air:** Instrument grade

**Max. Aspirator**

**Pressure:** 30 psig (206 kPa)

**Min. Air**

**Consumption:** 0.6 CFM at 20 psig (137 kPa)

**Max. Air**

**Consumption:** 0.9 CFM at 30 psig (206 kPa)

## Aspirated and DC Pump Model Specifications

**Sample Transport Time:**

30 s at 0.5 LPM with 50 ft (15.25 m) of 0.180" (4.57 mm) ID tubing

**Nominal**

**Flow Rate:** 2 CFH (1 LPM)

**Minimum**

**Flow Rate:** 1 CFH (0.5 LPM)

**Approval:** C-UL-US (Enclosure only)

**Classification:** Class I, Div. 1, Groups A, B, C & D

**Compatible**

**Products:** S4000CH, S4100C, IR400, S4000TH, S4100T, TS4000H

**Accessories:** Pressure gauge, end-of-line filters, in-line filters, flashback arrestor

**Warranty:** One year

## Mechanical Specifications

**Dimensions:** 9" x 6" x 5"  
(229 mm x 152 mm x 127 mm)

**Weight:** 4.5 lbs. (2 kg)

**Fittings:** 1/4" (6.35 mm) OD tube fitting

**Inlet and Exhaust Calibration Fitting:**

1/4" (6.35 mm) OD barbed fitting

## Environmental Specifications

**Operating Temperature**

**Range:** -4°F to +131°F (-20°C to +55°C)

**Operating Humidity**

**Range:** 15-95% RH, non-condensing

## Electrical Specifications

**Max Power**

**Consumption:** 1.8 W at 9 - 30 VDC (Aspirated Model)  
8.5 W at 9 - 30 VDC (DC Pump Model)

**Electrical**

**Entry:** 3/4" - 14 NPT

**Trouble Relay**

**Rating:** SPDT, 0.6 A at 125 VAC, 0.6 A at 110 VDC, 2 A at 30 VDC

**Cable**

**Requirements:** 18 AWG, shielded, twisted-pair (typical)

**Max. Sample Tubing Length:**

100 ft (30 m)

**Max. Exhaust Tubing Length:**

20 ft (6 m)

**Status**

**Indicators:** Low flow

**Part Numbers:** SM100ASP (P/N 10058101)

SM100DCP (P/N 10043264)

*Specifications subject to change without notice.*

## *Represented by:*

### General Monitors Worldwide

[www.generalmonitors.com](http://www.generalmonitors.com)

#### Lake Forest, CA

26776 Simpatica Circle  
Lake Forest, California 92630

Tel: +1-949-581-4464

Fax: +1-949-581-1151

email: [info@generalmonitors.com](mailto:info@generalmonitors.com)

#### Houston, TX

9776 Whithorn Drive  
Houston, Texas 77095

Tel: +1-281-855-6000

Fax: +1-281-855-3290

email: [gmhou@generalmonitors.com](mailto:gmhou@generalmonitors.com)

#### Ireland

Ballybrit Business Park  
Galway

Republic of Ireland

Tel: +353-91-751175

Fax: +353-91-751317

email: [info@gmil.ie](mailto:info@gmil.ie)

#### Singapore

No. 2 Kallang Pudding Road  
#09-16 Mactech Building  
Singapore 349307

Tel: +65-6748-3488

Fax: +65-6748-1911

email: [genmon@gmpacifica.com.sg](mailto:genmon@gmpacifica.com.sg)

#### United Arab Emirates

P.O. Box 61209

Jebel Ali

Dubai

United Arab Emirates

Tel: +971-4-8143814

Fax: +971-4-8857587

Email: [gmme@generalmonitors.ae](mailto:gmme@generalmonitors.ae)

#### United Kingdom

Heather Close

Lyme Green Business Park  
Macclesfield, Cheshire

United Kingdom, SK11 0LR

Tel: +44-1625-619583

Fax: +44-1625-619098

Email: [info@generalmonitors.co.uk](mailto:info@generalmonitors.co.uk)

#### Wuxi General Monitors

*A joint venture*

157 Hubin Road, C-11 1F

Wuxi, Jiangsu Province 214073

People's Republic of China

Tel: +86-510-8512 2222

Fax: +86-510-8512 8222

email: [sales@wxglt.com](mailto:sales@wxglt.com)