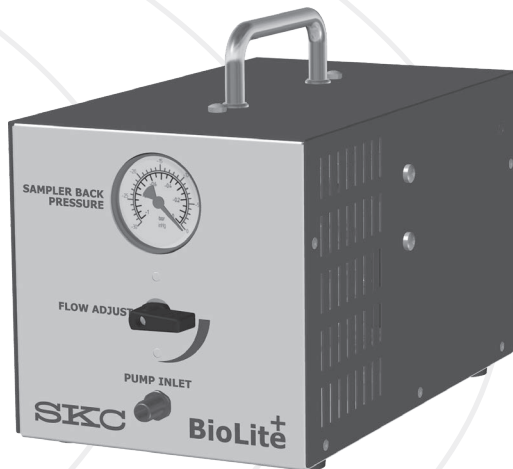




[www.skcltd.com](http://www.skcltd.com)

## BioLite+ Air Sampling Pump

### Operating Instructions



This manual covers the following models:

228-9615 & 228-9620

## Purchase Details and Service History

Thank you for choosing an SKC product. Your purchase is covered by our warranty, details of which can be found inside the rear cover of this manual.

Product Model Number	Product Serial Number	Date of Purchase

SKC recommends a minimum service interval of one year for this product. The first service is due one year from the date of purchase, and then at yearly intervals on this date. However, it is the responsibility of the user to perform a risk assessment to determine the necessary frequency of servicing that is required.

Service	Date	Service	Date	Service	Date
1		5		9	
2		6		10	
3		7		11	
4		8		12	

Please note that SKC Ltd are the only authorised service centre in the UK, guaranteeing you access to the full range of genuine SKC replacement parts. For all other areas a full list of SKC approved distributors and service centres can be found at [www.skcltd.com](http://www.skcltd.com)

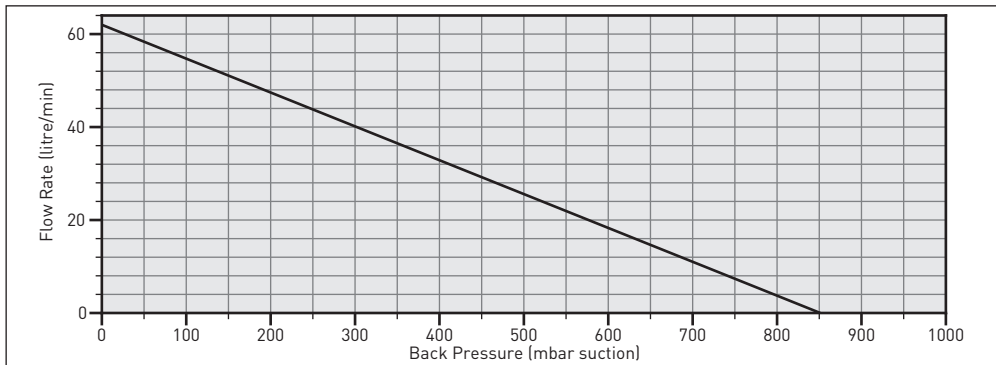
SKC UK service centre - Tel: +44 (0)1258 480188 Fax: +44 (0)1258 480184 Email: [info@skcltd.com](mailto:info@skcltd.com)

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# Specifications

- Maximum flow rate: 62 litre/min
- Maximum back pressure: 850mbar
- Dimensions: W x H x D 162 x 209 x 303mm
- Weight: Model 228-9615 - 7.42kg (16.32 lb) / Model 228-9620 - 7.25kg (15.95 lb)
- Enclosure rating - IP20
- Operating temperature: 0°C to +40°C
- Operating humidity: 0 to 95% Rh
- Operating noise level: 61 to 66 dBA @ 1metre (dependent on flow rate and back pressure)

Electrical:	Model	Mains Supply	Maximum Input Current
	228-9615	120V ~ 60Hz	3.15A
	228-9620	230V ~ 50Hz	1.25A



## 1) Pump Models

228-9615	BioLite+ pump for 120V ~ 60Hz electrical mains supply with 3pin USA mains lead
228-9620	BioLite+ pump for 230V ~ 50Hz electrical mains supply with 3pin UK and 2pin EU mains leads

## 2) Care of the BioLite+ Pump

- The BioLite+ pump is available in two variants for different electrical mains supplies (see table above). Do not use the pump with electrical mains supply other than that for which it is designed.
- Do not block the ventilation grilles at either side of the pump or the cooling fan inlet grill at the rear of the pump during operation.
- Do not open the pump casing when the mains supply is connected to the pump - Potential electric shock hazard.
- A small quantity of carbon dust will be exhausted from the pump outlet in normal operation due to normal wear of the graphite pump rotor vanes.
- The BioLite+ pump case is IP20 rated, it is not rated as water or splashproof and therefore must not be used where it is possible for water to enter the pump casing.

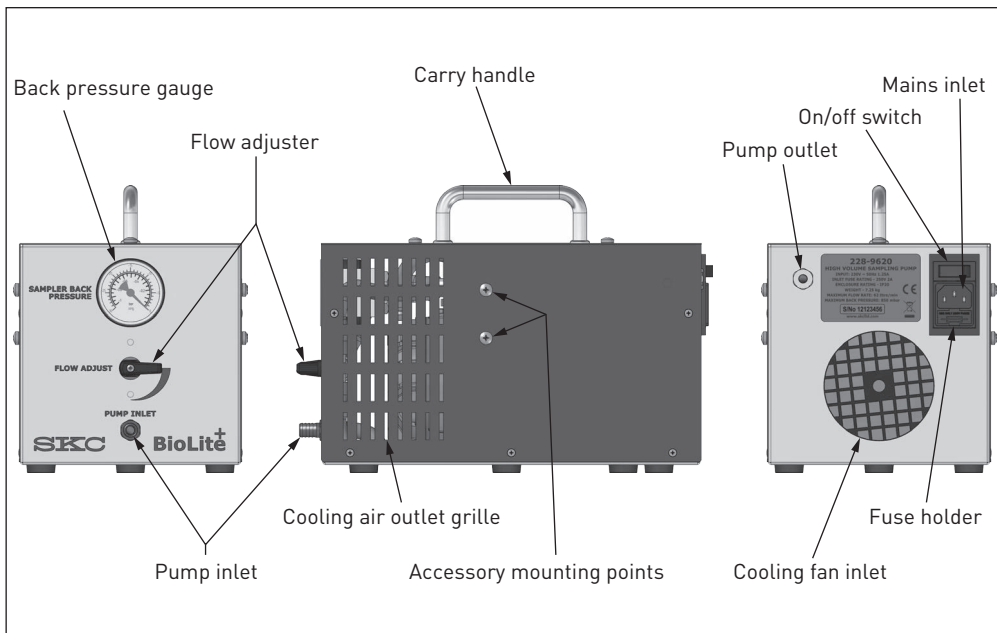
**Warning - Failure to follow these guidelines will void the product warranty.**

## 3) The WEEE Directive



This product is marked with the crossed out wheellie bin symbol, which identifies that it falls within the scope of the EU Directive 2002/96/EC on waste electrical and electronic equipment (WEEE). At the end of its useful life, this product must be disposed of in an environmentally sound way as detailed in the Directive. Please contact your local distributor or SKC Ltd for further details on how to comply with the requirements of the WEEE Directive.

# The Biolite+ Pump



1. Insert the mains lead into the IEC mains inlet at the rear of the pump and plug the lead into a suitable mains outlet socket. Both UK 3 pin and Euro 2 pin mains leads are supplied with the 228-9620 model, select the correct lead for your location.
2. Turn the flow adjuster fully counter-clockwise to ensure that it is fully open. Switch on the mains supply. Switch on the pump using the on/off switch at the rear of the pump. Allow the pump to run for five to ten minutes to stabilise before commencing any flow adjustment. Switch the pump off using the on/off switch at the rear of the pump.
3. Connect the sample train to the pump inlet hoesetail. Switch on the pump using the on/off switch. Adjust the flow rate if required using the flow adjuster. Turn the flow adjuster clockwise to reduce the flow rate and anti-clockwise to increase the flow rate. Allow the pump to run for five minutes for the flow rate to stabilise before taking any flow verification readings.
4. The back pressure gauge gives a reading of the vacuum generated by the pump due to the restriction to flow of the sample train. This is important for indicating correct operation of the SKC Biosampler - the Biosampler achieves sonic flow at a suction of 15in Hg (refer to the Biosampler instructions for further details).

Possible Fault	Corrective Action
Pump does not operate	<ul style="list-style-type: none"> <li>• Check that mains power is present at the mains socket.</li> <li>• Ensure that pump on/off switch is in the on position.</li> <li>• If using the UK 3 pin mains lead check for blown fuse in the UK 3 pin mains plug and replace with an identical fuse if required.</li> <li>• Check for blown inlet fuse at the rear of the pump and replace with an identical fuse if required.</li> </ul>
Pump cannot achieve required flow rate	<ul style="list-style-type: none"> <li>• Check for leakages in the sample train.</li> <li>• Pump vanes damaged or excessively worn. Return pump to SKC Limited for service / repair.</li> </ul>
Pump stops due to over-temperature	<ul style="list-style-type: none"> <li>• Check for flow blockages in the sample train and rectify if required. Wait for pump to cool before restarting.</li> <li>• Check that the flow adjust control is not fully closed. Wait for pump to cool before restarting.</li> </ul>
Pump not running and produces 'humming' noise.	<ul style="list-style-type: none"> <li>• Pump rotor vanes have jammed. Switch off pump immediately. Return pump to SKC Limited for service / repair.</li> </ul>



Part No.	Description
Accessories	
225-9593	Biosampler kit with 5ml vessel
225-9595	Biosampler kit with 20ml vessel
228-9611	Biosampler mounting bracket for BioLite / BioLite+ pump
Replacement Parts	
P228920	Inlet fuse 2A for 228-9620 model only
P228921	Inlet fuse 4A for 228-9615 model only
P228922	Pump rotor vanes (set of four)

If the required item is not listed, contact your supplier or SKC sales on +44 (0) 1258 480188.

SKC provide an extensive range of sampling media, including filters, sorbent tubes and impingers. A full selection can be found in the current SKC catalogue and at [www.skcltd.com](http://www.skcltd.com)

## Limited One Year Warranty

1. SKC warrants that this instrument, and each of its component parts, provided for occupational health and safety and environmental applications is free from defects in workmanship and materials under normal use for a period of one (1) year. This warranty DOES NOT cover any claims due to abuse, misuse, neglect, alteration, or accident, or use in application for which the instrument was either not designed or not approved by SKC, or, due to the buyer's failure to maintain normal maintenance, improper selection or misapplication. This warranty shall further be void if changes or adjustments to the instrument are made by a person other than an employee of the seller or, if the operating instructions furnished at the time of installation are not complied with.

2. SKC hereby expressly disclaims all warranties either expressed or implied, including any implied warranties of merchantability or fitness for a particular purpose and neither assumes nor authorises any person to assume for it any liability in connection with the sale of these instruments. No description of the goods being sold has been made a part of the basis of the bargain or has created or amounted to an express warranty that the goods will conform to any such description. The Buyer shall not be entitled to recover from SKC any consequential damages; damages to property, damages for loss of use, loss of time, loss of profits or income or any other incidental damages. Nor shall the Buyer be entitled to recover from SKC any consequential damages resulting from defect of the instrument.

3. This warranty extends only to the original purchaser of the warranted instrument during the term of the warranty, the buyer may be required to present proof of purchase in the form of a paid receipt for the instrument.

4. In the event of a defect, malfunction, or other failure of the instrument not caused by any misuse or damage to the instrument while in the possession of the Buyer, SKC will remedy the failure or defect

without charge to the buyer. The remedy will consist of service or replacement of the instrument, or refund of the purchase price, at the option of SKC. However, SKC will not elect refund unless it is unable to provide replacement and repair is not commercially practicable.

5. The terms of this warranty begin on the date the instrument is delivered to the buyer and continue for a period of one (1) year.

6(a) To obtain performance of any obligation under this warranty, the buyer shall return the instrument, freight prepaid to SKC at the following address:-

SKC Limited

11 Sunrise Park

Higher Shaftesbury Road

Blandford Forum

Dorset DT11 8ST

t: 44 (0) 1258 480188

f: 44 (0) 1258 480184

6(b) To obtain further information on the warranty performance contact SKC.

7. This warranty is provided under English law.

8. No other warranty is given by SKC in conjunction with this sale.

The disclaimers and limitations shall not affect the statutory rights of the consumer.



Air Sampling Solutions & Expertise