



ENVIRONMENT
AGENCY

PRODUCT CONFORMITY CERTIFICATE

This is to certify that the

***GENIE-B/UWWTR, GENIE-B, GENIE-J/UWWTR,
GENIE-J Portable Automatic Waste Water Samplers***

manufactured by:

SIRCO Controls Ltd

*Sweynes Industrial Estate
Ashingdon Road
Rochford
Essex
SS4 1RQ*

has been assessed by Sira Certification Service
and for the conditions stated on this certificate complies with:

**MCERTS Performance Standards for Continuous Water
Monitoring Systems, Part 1, Version 2 (Oct 2006)**

Certification Range :

Lift Height 0 to 7 metres

Project No: 674/0202
Certificate No: Sira MC 070105/02
Initial Certification: 15 March 2007
This Certificate Issued: 12 July 2010
Renewal Date: 14 March 2012

Technical Director

MCERTS is operated on behalf of the Environment Agency by

Sira Certification Service

12 Acorn Industrial Park, Crayford Road, Crayford
Dartford, Kent, UK, DA1 4AL
Tel: 01322 520500 Fax: 01322 520501

This certificate may only be reproduced in its entirety and without change



ENVIRONMENT
AGENCY

Approved Site Application

Any potential user should ensure, in consultation with the manufacturer, that the water monitoring system is suitable for the process on which it will be installed.

The GENIE-B/UWWTR product is suitable for use on applications for compliance with the Urban Wastewater Treatment Regulations. The GENIE-B/UWWTR portable sampler can be operated at any site where UWWTR sampling is required with or without a mains power source and is suitable for indoor or outdoor use.

The GENIE-B portable automatic effluent sampler is suitable for any sampling application where cooling of the sample is either not critical or not required. This sampler can be operated at any site with or without a mains power source and is suitable for indoor or outdoor use.

The GENIE-J/UWWTR portable automatic effluent sampler is a more compact version of the GENIE-B/UWWTR sampler which meets the E32 specification for automatic sampling equipment for the Urban Wastewater Treatment Regulations. This sampler can be operated at any site where UWWTR sampling is required with or without a mains power source and is suitable for indoor or outdoor use.

The GENIE-J is a lightweight composite only portable automatic effluent sampler which is suitable for any sampling application where cooling of the sample is not required. This sampler can be operated at any site with or without a mains power source and is suitable for indoor or outdoor use.

Basis of Certification

This certification is based on the following Test Report(s) and on Sira's assessment and ongoing surveillance of the product and the manufacturing process:

WRc Report Ref: UC 3966 dated October 2001

Product Certified

This certificate applies to all GENIE-B and GENIE-J portable samplers fitted with software version V1.5 onwards (serial number 000906E onwards).

Certificate No: Sira MC 070105/02
This Certificate Issued: 12 July 2010



ENVIRONMENT
AGENCY

Certified Performance

The instrument was evaluated for use under the following conditions:

Ambient Temperature Range: -10°C to $+40^{\circ}\text{C}$

Test	Results	MCERTS specification										
Sample Collection	Flow proportional and timed sampling available. Certified for use with 24 x 1L bottles.	Clause 3.1.3										
Sample Volume <ul style="list-style-type: none"> Max discrete sample Storage capacity 	300ml stated 25L composite, 24 x 500ml, 24 x 1L, 1 x 5L, 1 x 15L available	Clause 3.2.1										
Sampling head <ul style="list-style-type: none"> Max sampling head 	7.5 metres Certified for maximum of 7 metres	Clause 3.2.2										
Sample interval <ul style="list-style-type: none"> Time proportional sampling Flow proportional sampling 	Sample interval range is 1min to 99 hours 1 min intervals is selectable Flowmeter (proportional) contact closure or 4-20mA output are available Number of pulses per sample adjustable	Clause 3.1.3										
Sample failure	Sample failures recorded. Fault indicated on display	Clause 3.1.6										
Sample line diameter	10 mm	Clause 3.1.8 >9 mm										
Sample volume error	<table> <tr> <td>Systematic Errors:</td> <td>Random Errors:</td> </tr> <tr> <td>0.17% at 1m</td> <td>0.5% at 1m</td> </tr> <tr> <td>0.3% at 3.5m</td> <td>0.9% at 3.5m</td> </tr> <tr> <td>0.03% at 7m</td> <td>0.6% at 7m</td> </tr> <tr> <td>Overall: 0.17%</td> <td>Overall: 0.67%</td> </tr> </table>	Systematic Errors:	Random Errors:	0.17% at 1m	0.5% at 1m	0.3% at 3.5m	0.9% at 3.5m	0.03% at 7m	0.6% at 7m	Overall: 0.17%	Overall: 0.67%	Clause 4.1.1 <5% <5% <5% <5%
Systematic Errors:	Random Errors:											
0.17% at 1m	0.5% at 1m											
0.3% at 3.5m	0.9% at 3.5m											
0.03% at 7m	0.6% at 7m											
Overall: 0.17%	Overall: 0.67%											

Certificate No: Sira MC 070105/02
This Certificate Issued: 12 July 2010

This certificate may only be reproduced in its entirety and without change



**ENVIRONMENT
AGENCY**

Test	Results	MCERTS specification								
Sample line velocity	0.91 m/s at 1 m sampling head 0.83 m/s at 2 m sampling head 0.83 m/s at 3 m sampling head 0.78 m/s at 4 m sampling head 0.73 m/s at 5 m sampling head 0.64 m/s at 6 m sampling head 0.55 m/s at 7 m sampling head	Clause 4.1.2 >0.5 m/s >0.5 m/s >0.5 m/s >0.5 m/s >0.5 m/s >0.5 m/s >0.5 m/s								
Sample integrity	No statistically significant difference was found in analysis for BOD, COD, suspended solids, total N and total P	Clause 4.1.3								
Sample timing	<1 sec	Clause 4.1.4 < ±10 sec/24h								
Ambient temperature <ul style="list-style-type: none"> Sampler with sample temperature control (maintain sample between 0°C to 5°C) 	<table border="0"> <tr> <td>During sample period:</td> <td>24hrs after sample period:</td> </tr> <tr> <td>3.56°C at -10°C</td> <td>0.13°C at -10°C</td> </tr> <tr> <td>3.72°C at 15°C</td> <td>1.41°C at 15°C</td> </tr> <tr> <td>4.91°C at 40°C</td> <td>1-5°C at 40°C*</td> </tr> </table> <p>*At 40°C ambient the sample temperature exceeds 5°C after 10.5 hours from the end of the sampling period.</p> <p>Formation of ice was observed after 8 hours from the end of the sampling period.</p> <p>It is recommended that when the sampler is deployed in conditions where the temperature may remain above 30°C during the period of deployment, the samples should be retrieved within a period of 10.5 hours from the end of the sampling period to minimise the risk of the sample temperature exceeding 5°C.</p> <p>It is recommended that when the sampler is deployed in conditions where the temperature may remain <0°C during the period of deployment, the samples should be retrieved within a period of 8 hours from the end of the sampling period to minimise the risk of ice formation.</p>	During sample period:	24hrs after sample period:	3.56°C at -10°C	0.13°C at -10°C	3.72°C at 15°C	1.41°C at 15°C	4.91°C at 40°C	1-5°C at 40°C*	Clause 4.1.5b <5°C <5°C <5°C
During sample period:	24hrs after sample period:									
3.56°C at -10°C	0.13°C at -10°C									
3.72°C at 15°C	1.41°C at 15°C									
4.91°C at 40°C	1-5°C at 40°C*									

Certificate No: Sira MC 070105/02
 This Certificate Issued: 12 July 2010

This certificate may only be reproduced in its entirety and without change



ENVIRONMENT
AGENCY

Description:

GENIE-B/UWWTR

The GENIE-B/UWWTR portable effluent sampler is a weatherproof sampler suitable for sampling from an open channel or vessel using the vacuum/pressure method of sampling. The sample once collected is deposited in a 5 litre sample container which is housed in a fully insulated base section, which will store the sample between 0 and 5° C for up to a 48 hour period as per the requirements of the UWWTD. Cooling is provided by 6 standard ice packs which are frozen prior to deployment of the sampler.

The sampler is fully weatherproofed and is suitable for indoor or outdoor use and its casing is manufactured from high density polypropylene. The sampler weighs 13.5 kg (excluding sample container and ice packs), and has a maximum diameter of 450 mm with a height of 1060 mm. The sampler can be operated from an external battery pack or 12 vdc mains power supply unit.

GENIE-B

The GENIE-B portable effluent sampler is a weatherproof sampler suitable for sampling from an open channel or vessel using the vacuum/pressure method of sampling, and is most suited when sample cooling is not critical or required. The sampler can be provided with various interchangeable sample bottle options including 24 x 500 ml, 24 x 1 litre and 1 x15 litre.

The sampler is fully weatherproofed and is suitable for indoor or outdoor use and its casing is manufactured from high density polypropylene. The sampler weighs 14 kg (depending on sample bottle configuration), and has a maximum diameter of 450 mm with a height of 775 mm (with standard 24 x 500ml base section). The sampler can be operated from an external battery pack or 12 vdc mains power supply unit.

GENIE-J/UWWTR

The GENIE-J/UWWTR portable effluent sampler is a weatherproof sampler suitable for sampling from an open channel or vessel using the vacuum/pressure method of sampling. The sample once collected is deposited in a 5 litre sample container which is housed in a fully insulated base section, which will store the sample between 0 and 5° C for up to a 48 hour period as per the requirements of the UWWTD. Cooling is provided by 6 standard ice packs which are frozen prior to deployment of the sampler.

The sampler is fully weatherproofed and is suitable for indoor or outdoor use and its casing is manufactured from high density polypropylene. The sampler weighs 14 kg (excluding sample container and ice packs), and has a maximum diameter of 420 mm with a height of 900 mm. The sampler can be operated from an external battery pack or 12 vdc mains power supply unit.

Certificate No: Sira MC 070105/02
This Certificate Issued: 12 July 2010

This certificate may only be reproduced in its entirety and without change



ENVIRONMENT
AGENCY

GENIE-J

The GENIE-J portable effluent sampler is a weatherproof sampler suitable for sampling from an open channel or vessel using the vacuum/pressure method of sampling, and is most suited when sample cooling is not required. The sample once collected is deposited in a 10 litre sample container.

The sampler is fully weatherproofed and is suitable for indoor or outdoor use and its casing is manufactured from high density polypropylene. The sampler weighs 7 kg, and has a maximum diameter of 312 mm with a height of 527 mm. The sampler can be operated from an external battery pack or 12 vdc mains power supply unit.

General Notes

1. This certificate is based upon the equipment tested. The Manufacturer is responsible for ensuring that on-going production complies with the standard(s) and performance criteria defined in this Certificate. The Manufacturer is required to maintain an approved quality management system controlling the manufacture of the certified product. Both the product and the quality management system shall be subject to regular surveillance according to 'Regulations Applicable to the Holders of Sira Certificates'. The design of the product certified is defined in the Sira Design Schedule for certificate No. Sira MC 070105/02.
2. If certified product is found not to comply, Sira Certification Service should be notified immediately at the address shown on this certificate.
3. The Certification Marks that can be applied to the product or used in publicity material are defined in 'Regulations Applicable to the Holders of Sira Certificates'.
4. This document remains the property of Sira and shall be returned when requested by the company.

Certificate No: Sira MC 070105/02
This Certificate Issued: 12 July 2010

This certificate may only be reproduced in its entirety and without change