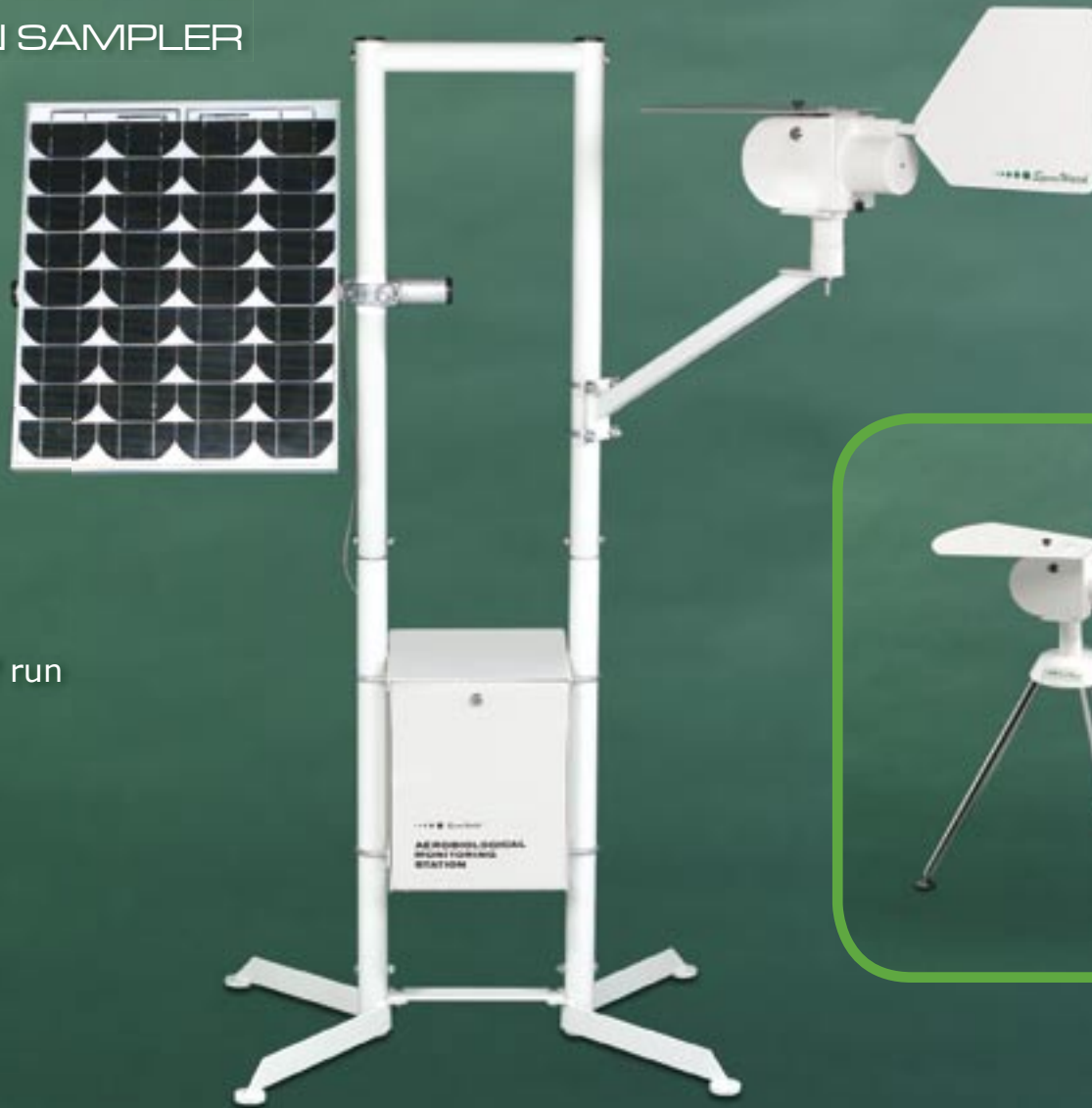


• • • • • *SporeWatch*
ELECTRONIC SPORE & POLLEN SAMPLER

- All electronic operation
- 16 Selectable sampling periods
- Automatic shutdown on completion of run
- High performance adjustable air flow
- Lockable sampling chamber
- Lightweight portable construction



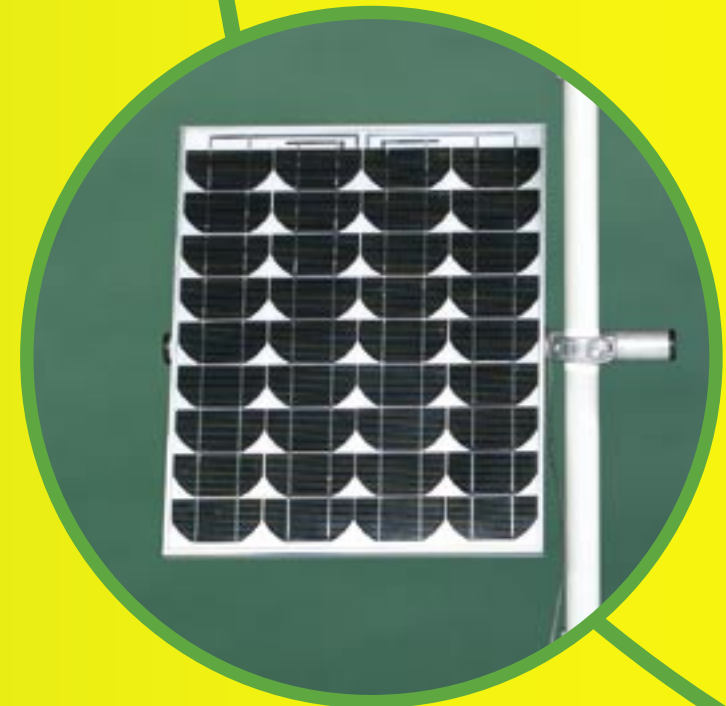


Features

- All electronic operation
- 16 Selectable sampling periods
- Automatic shutdown on completion of run
- High performance adjustable air flow
- Lockable sampling chamber
- Lightweight portable construction

Options

- Support arm for mounted operation or tripod for stand alone operation
- Mains or battery operation
- Solar power option
- Aerobiological monitoring station with humidity and temperature data logging and lockable control cabinet.



THE NEW STANDARD OF REFERENCE

The 'SporeWatch' electronic spore & pollen sampler is the next generation of spore sampler adhering precisely to the specifications and methodology of the original Hirst spore sampler that is in common daily use around the world today but with the benefits of lower cost, reduced size and increased flexibility.

The instrument compares closely to the trap described by Hirst in 1952 (Ann app. Biol 39 pp. 257-265) although its performance has been enhanced by the use of interchangeable orifices to improve the trapping efficiency for particles in the range 1-10µm diameter. The orifices and air throughput are identical to the Hirst spore sampler and internally the sampler utilizes a similar drum and tape assembly.

Tested with the assistance of respected scientists working with problems relating to airborne particles such as fungus spores and pollens the SporeWatch sampler has been proved as an interchangeable replacement to the Hirst spore sampler and offers the performance (or higher) of its predecessor.

IMPROVED CONTINUOUS SAMPLING

The SporeWatch spore & pollen sampler has been enhanced by the use of electronics to control the sampler operation providing advanced features such as 16 selectable sampling periods, auto shutdown (avoiding over-impaction) and simple stop/start operation.

The mode of operation is identical to the Hirst spore sampler in which spores are impacted on adhesive coated transparent plastic tape (Melinex) supplied and supported on a drum with a standard circumference. The vane makes the sampler sensitive to small changes in wind direction. Adjustment of the 10-litre/min throughput is possible with a metering screw conveniently situated on the underside of the unit.

MAINS OR BATTERY OPERATION

The vacuum pump is mains or battery powered utilizing an external encapsulated power unit or 12V battery.

SOLAR POWER OPTION

The spore sampler solar power kit is a compact and highly efficient solar pack that can support continuous operation in all weather conditions in any country. The standard solar panel is only 330mm x 1300mm x 35mm and provides 55 Watts of power. Panels are constructed with an aluminium frame for floor, roof or pole mounting. The kit includes a battery & controller which allows operation over night from the charge it receives during the day providing continuous 24 hour operation. The Solar power kit provides the answer to the free standing power requirements of the SporeWatch spore sampler at minimal cost.

CONSTRUCTION AND EQUIPMENT DETAILS

To avoid corrosion against normal weather conditions all parts are protected by hard stove enamel or anodizing. The use of aluminium in the design and construction of the spore trap makes it light weight and readily portable for field use. Drum changing on site is a quick and simple operation. The lockable instrument side cover opens for easy access to all the controls and the drum. SporeWatch sampler is supplied with optional support arm (for fitting to a monitoring station or other mounting sites) or stand-alone tripod. An integral setting level simplifies instrument setup.

AEROBIOLOGICAL MONITORING STATION

The aerobiological monitoring station has been designed for use in areas such as agricultural science, meteorology, medical technology and forestry research. The station allows the user to monitor temperature and humidity over the sampling period. The data is logged and can be downloaded for lab analysis. It also provides a stable platform for mounting the sampler and solar panels and the battery can be conveniently housed in the control cabinet.



FEATURES COMPARISON CHART

FEATURES	SPOREWATCH SAMPLER	HIRST SAMPLER
Long period of sampling	Yes	Yes
16 Selectable Sampling Periods	Yes	No (7 day/24 hour options only)
Automatic Shutdown	Yes	No
High performance adjustable airflow	Yes	Yes
Lockable sampling chamber	Yes	No
Lightweight portable construction	Yes	No
Mains and battery operation	Yes (mains adaptor additional)	Optional
Easy drum change	Yes	No

GENERAL SPECIFICATION

SAMPLING DURATIONS	1, 3, 6, 9, 12, 15, 18, 21, 24hrs, 2, 3, 4, 5, 6, 7 days.
DRUM MOVEMENT	2mm/hour (7 day period) motor driven with electronic control.
THROUGHPUT AT ORIFICE	10 litres/minute
STANDARD ORIFICE SIZE	2mm x 14mm
IMPACTION TAPE	Clear Melinex: 200 gauge
OVERALL HEIGHT OF SAMPLER	Variable
WORKING AREA OF SAMPLER	0.882 sq. metre through 50cm radius
POWER REQUIREMENTS	12VDC (mains, battery, solar panel supply)
NET WEIGHT	3.5 Kg
PACKED WEIGHT	11.5 Kg
DIMENSIONS	240 x 100 x 550mm

The company reserves the right to change specification without notice.

EQUIPMENT

Standard

- Trimming block & sectioning guide for Melinex tape
- 1 roll double sided tape
- 1 roll Melinex tape (100m)
- 1 Kg Gelvatol
- Stand for coating drum
- Carrying box for drum

Optional

- Flow Meter
- Mains converter (120VAC/60Hz - 12VDC or 240VAC/50Hz - 12VDC)
- Alternative orifice - 14mm x 2mm reducing to 0.5mm.
- Additional drum

RECOMMENDED OPTIONS

For portable operation:

1. SporeWatch sampler (BS02488) + tripod (BS02502)
2. Optional solar panel kit (BS02306 + BS02307+ BS02308)
3. Optional pole with guy-ropes for solar panel (BS02501)

For mounted operation:

1. SporeWatch sampler (BS02488) + support arm (BS02500)
2. Optional half or full height frame (BS02493/4) + battery box (BS02503)
3. Optional solar panel kit (BS02306 + BS02307+ BS02308)

For monitoring station operation:

1. SporeWatch sampler (BS02488) + aerobiological monitoring station (BS02489 or BS02490)
2. Optional solar panel kit (BS02306 + BS02307+ BS02308)

ORDERING INFORMATION

DESCRIPTION	PRODUCT CODE
SporeWatch Electronic Spore Sampler	BS02488
SporeWatch Aerobiological Monitoring Station* (1m)	BS02489
SporeWatch Aerobiological Monitoring Station* (2m)	BS02490
Support Arm	BS02500
Tripod	BS02502

*Includes temperature and humidity data logger/detectors, support arm, battery box & frame.

MANUFACTURED BY:

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