

BioSentinel™



INTELLIGENT Critical Parameter Monitoring (Temperature, Ph, CO₂)

BioSentinel™ - Details:

BioSentinel™ is a microprocessor based temperature monitor alarm for freezers, fridges, bloodbanks, incubators, oven, etc. Deviations from the required set point temperature can be caused by:

- 🔥 Prolonged power failure.
- 🔥 Equipment 'malfunction' (e.g. door left open, compressor failure).

BioSentinel™ protects the valuable contents alerting the user to the potentially catastrophic effects occasioned by such failure or malfunction. The unit is available with 3 channels as standard, which can be upgraded to a maximum of 8 channels, simply and inexpensively. Multiple installations in a local area or different geographic locations can be monitored by the daisy-chaining of several central units, configured to meet user-specified requirements.

BioSentinel™ - Features:

Liquid Crystal Display (LCD) (4-line character/line) and keypad for:

- 🔥 Display of all channels being monitored, 'alarmed' channel highlighted.
- 🔥 Set-up of calibration, individually for each channel.
- 🔥 Set-up of high/low alarm limits and drift for each channel.
- 🔥 Selection of time/date.
- 🔥 'Disabling' of the alarmed channel once the fault has been acknowledged.

All the above can be easily configured by the user, using simple, screen prompted, menu-driven software.

In addition to the above, other key features include:

- DIN sockets.
- Automatic activation of built-in Piezo-electric, local, audible alarm and optional modem/autodialler link if alarms limits are breached.
- Time and date stamping of alarmed channel for transmission via modem to the host computer (optional).
- 'Anticipatory Algorithm' which monitors the rate of change from set-point and warns the user well before the alarm point is reached, that the increase of temperature, will result in the alarm set-point being exceeded. This feature is an important early warning system particularly when e.g. the door is left open.
- Data transfer to a host computer in ASC via RS232/RS422 like (optional).
- Link to a dot matrix printer for logging of data to provide a hard copy (optional).
- 'Daisy-Chaining' of several **BioSentinel™** units so that only one autodialler/printer need be employed, for a bank of monitored units.

Real Time Clock:

- Allows 'real-time' data logging of measured variable, important for Q.C. mapping temperature.

Battery Backed RAM:

- Allows data retrieval on power failure.

BioSentinel™ – Technical Specifications:

Number of Channels/units	<ul style="list-style-type: none"> • 3-8 per unit (Daisy chain units for more inputs)
Type of Input	<ul style="list-style-type: none"> • PT 100/4 wire system
Temperature Range	<ul style="list-style-type: none"> • -80°C to +99°C (accurate to 0.1°C)
Host Communication	<ul style="list-style-type: none"> • RS232/RS422 (selectable baud rate)
Host Alarm	<ul style="list-style-type: none"> • Voltage free relay contact or modem
Data Storage	<ul style="list-style-type: none"> • Circular buffer 24 Kbyte battery RAM
Scan Rate	<ul style="list-style-type: none"> • 30 seconds
Audible Alarm	<ul style="list-style-type: none"> • Built-in Piezo-electric buzzer
Connection (*Optional)	<ul style="list-style-type: none"> • 5 way 180 DIN for PT100 • *9 way male 'D' type for RS232/RS422 • *3 way DIN for autodialler
Real-time Clock	<ul style="list-style-type: none"> • RTC battery backed
Supply Voltage	<ul style="list-style-type: none"> • 240V / 110V switch selectable
Dimensions (Approximate)	<ul style="list-style-type: none"> • Width 12.0cm • Depth 10.0cm • Height 22.5cm
Enclosure	<ul style="list-style-type: none"> • Designed for wall mounting, of polyester painted steel