

Adena ZooDACTM

Zoological Data Acquisition & Control System

ZooDAC is a modular, networked, software and hardware solution designed to automatically monitor, record, and control the environment in animal enclosures at zoological facilities.

- ★ Collect enclosure climate data to support research and management.
- ★ Control enclosure climate and lighting with seasonal variation.
- ★ Email enclosure temperature errors and other alarms to staff.
- ★ Enable staff to focus more on animal care and conservation tasks.



Meet The ZooDAC Family

ZooLog - Climate monitoring for exhibit enclosures.

- Monitor and log enclosure and external temperature and relative humidity measurements.
- Monitor and log enclosure soil moisture and temperature measurements. (Optional)
- Electricity use kWh logged as hourly and daily totals.
- User adjustable monthly temperature setpoints to linked to alarms to allow for seasonal variation.
- Alarm email messages for enclosure temperature too high or too low, and other system events.
- Datalogger web interface enables remote viewing of station measurements and other parameters.
- Data files downloadable to Windows based PC using Campbell Scientific LoggerNet software.

ZooMate - Climate monitoring and control for exhibit enclosures.

- All ZooLog functions plus...
- Fully automated control of enclosure ventilation fan and air conditioning equipment.
- Enclosure climate maintained with automatic seasonal temperature variation using monthly setpoints.
- Run times of the ventilation fan and air conditioning logged as hourly and daily totals.
- Manual override controls for ventilation fan and air conditioner.

ZooLife - Environment monitoring and control for nocturnal or diurnal exhibit enclosures.

- All ZooMate functions plus...
- Lighting control designed for permanently installed, dimmable, lighting loads.
- Lighting control provides one channel for plant grow lights. (Daylight lighting)
- Lighting control provides three channels for LED ribbon lights. (Moonlight lighting)
- Gradual transition between daylight and moonlight lighting phases using dimmer crossfade.

ZooLab - Environment monitoring and control for breeding labs and hospital rooms.

- All ZooMate functions, except soil sensor, plus...
- Lighting control designed for pluggable, non-dimmable, lighting loads.
- Lighting control user selectable for various diurnal and nocturnal modes.
- Lighting control includes diurnal build mode ideal for supplementary reptile basking lights.
- Quick and easy reconfiguration of room for different species.
- Up to nine portable temperature and relative humidity sensors for microclimate monitoring.

ZooRef - Monitoring for food storage rooms.

- Monitor and log the temperatures of 3 rooms, typically a walk-in Freezer, Fridge, and Pantry.
- Alarms for each room temperature too high or too low, power failure, and other system events.
- Door open too long alert sounder, and door left open alarm.
- Safety panic alarm to summon help if person trapped in a refrigerated room.

ZooDAC, is a modular, zoo-wide, networked, data acquisition and control system. Each module is able to operate as a standalone station or as an integral part of a fully networked site-wide system. Using our modular approach, there is no practical limit to the number of stations or the geographic spread of any given site providing that network connectivity is available for each station.

Adena Scientific believes that accuracy and reliability are paramount requirements of any system used in animal welfare roles so we purpose designed our ZooDAC system to meet zoological needs, and built it to run on dataloggers manufactured by Campbell Scientific in the USA and available worldwide.

The logo for Adena Scientific Ltd features the company name in a stylized, italicized yellow font. A blue and white orbital graphic surrounds the letter 'A'.

PO Box 756, Hamilton, New Zealand. Tel: (07) 829-7063 Email: sales@adena.co.nz