

HVAC CONTROL PANEL SOLUTIONS Project Portfolio

Control Panel Solutions (CPS), a division of Eurotec Ltd, has been building control panels for the HVAC&R and Industrial sectors since 2008.

CPS integrates and value-adds to the extensive range of HVAC&R and Electrical control and monitoring solutions sold by Eurotec to New Zealand industry for over 30 years. CPS offers pre-wired, engineered panels ensuring a plug and play operation on site saving valuable time and resources.





This portfolio features a selection of projects which demonstrate the range of Control Panel Solution's capabilities.





Car Park Ventilation Controller

The Car Park Ventilation controller enables control of car. park fans (exhaust/supply/jet fans) via Modbus control signals. Multiple zones can be set up using expansion modules, for managing and monitoring car park fans and sensors.

The controller operates the car park ventilation system in accordance with AS 1668.2:2012 by checking carbon monoxide levels and regulating the ventilation system. Expansion modules can be added to the system for individual zone control and Mechanical Service Switch Board control (Auto/Off/On).

The controller can also be integrated into the building Fire system and will operate in accordance with AS 1668.1:2015.



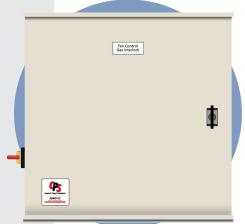
Commercial Kitchen Ventilation Solution

Our plug & play unit interlocks the extract and supply system in a commercial kitchen. This will allow a constant negative pressure in the kitchen, preventing smoke and fumes from travelling into your dining room. The addition of a pressure switch, can prevent overheating of the extract system if the fan is not working or the duct is blocked by shutting down the gas supply.

For control, there is an ON/Off switch with a trim pot which can be placed inside your kitchen. All of the controls and drives are housed in an IP66 enclosure and are preprogrammed, saving you costs on setup time.

The unit consists of:

- IP66 metal powder coated enclosure
- Air pressure switch and tubing kit
- Interfaced to speed control pot
- · Output for gas solenoid
- Outputs for option indication lights (SAF on, EAF on, Gas Sol. Open)







Lab Close Temperature & Humidity Control

This speciality product manufacturer required close temperature and humidity control in one of its testing labs. Eurotec supplied a Carel humidifier along with an Innotech PLC to control the environment in the lab.

Features:

- HMI Touch Screen
- · Real-time & historical data trending
- Run/Fault indication
- Alarm descriptions on HMI
- Web server with remote access



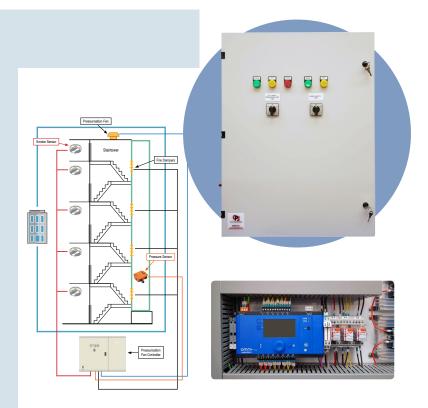


Stairwell & Lift Shaft Pressurisation Solution

One of the most hazardous situations that a building can face is smoke. While fires themselves are often damaging, smoke can cause the most injuries.

A smoke control system controls the flow of smoke in a building in the event of a fire. It keeps smoke from spreading through the building and gives the occupants a clear evacuation route, as well as preventing further damage to the building's interior.

Eurotec have developed the Lift Shaft & Stairwell Pressurisation Controller, which enables control of the pressurisation fan in your stairwell or lift shaft during a fire hazard. It does this by monitoring smoke sensors placed in the supply duct and stairwell/lift shaft.





High School Mechanical Services Switch Boards

CPS supplied a series of Mechanical Services Switch Boards for all new buildings at Whangarei Boy's High School using a BMS System.

- All boards contained Run Fault indication for connected equipment as well as Auto/Off/Manual switching.
- The mainboard contained the Mitsubishi central controller for the VRF system and was integrated into the BMS for monitoring purposes.
- The complete panels were tested before dispatch and supplied complete with wiring diagrams to provide an easy installation and commission on site.













Retirement Village **Natural Ventilation Control**

Eurotec supplied a control system for natural ventilation and smoke vents in a communal lobby of a retirement village.

Acting as natural ventilation in Auto mode the vents would open if rain was not detected, to provide airflow and allow heat to escape.

The controls were also integrated into the fire panel to open on fire and let the smoke escape.

Features:

- Fire Panel integration
- · Rain detection
- Natural ventilation control
- Auto/Manual control





College Gym HVAC

The gym is naturally ventilated using electric actuated roof and wall ventilators driven by Belimo actuators and controlled by an Innotech PLC. Gas heaters are controlled as required in conjunction with the wall ventilators to maintain a comfortable temperature in the gym for sports and other activities.

The system also monitored Co2 and had rain detection for the top vents which could let water in if left open.

Features:

- CO2 & temperature monitoring
- Rain detection
- · Gas heating control
- Natural ventilation control
- Remote access





PLC Vacuum Transfer System Control Panel

Strict engineering guidelines had to be adhered to for this large food manufacturers plant based in Papa New Guinea.

Using Allen Bradley Micro 850 PLC & Schneider Electric hardware, to match existing site-wide infrastructure, this control system was designed and built in-house to meet the customers specifications and operational sequence controlling transfer of bouillon powder into a cube press.

Features:

- Vacuum transfer of bouillon powder into a cube press.
- Sifter & Screw feeder motor control
- High & Low level sensors
- Factory operator start/stop station
- · Real time monitoring and data logging





Timber Pyrolysis Controls

Recycling building timber destined for the landfill and turning it into a charcoal product for domestic heating, Eurotec's control system closely monitors and maintains each chamber in the kiln to get the desired product outcome.

The client wanted to upgrade and improve their pyrolysis system to incorporate remote monitoring and control, as well as having a simple tablet interface for on-site operators.

Off-site managers are able to login and see real time values and even be able to interact remotely. Built in logging gives the client the ability to see historical temperature trends and ensure the pyrolysis process is working efficiently and effectively.

Features:

- Remote access over secure mobile VPN
- Web server graphical interface
- 4 x kiln chamber temperature control
- · Pressure monitoring
- · Real time monitoring and data logging



"I showed the remote monitoring and control capabilities at our board meeting this morning. Fair to say it went down very well and you were congratulated for your work."

~ Mike, CEO



NOTES

Please contact your local Eurotec HVAC Sales Engineer from the list below for a no obligation catch up.

Upper North Island

Kobus van Staden

kvanstaden@eurotec.co.nz DDI 09 526 7562 Mob 021 902 593

Bhavin Bhambhani

bbhambhani@eurotec.co.nz DDI 09 526 7561 Mob 021 920 289

Dimche Kocev

dkocev@eurotec.co.nz DDI 09 978 1439 Mob 021 752 616

Lower North Island

Clinton Packer

cpacker@eurotec.co.nz DDI 04 494 2403 Mob 021 439 090

South Island

Steve Cunningham

scunningham@eurotec.co.nz DDI 03 353 7146 Mob 021 581 113







Eurotec Ltd 750C Great South Road Penrose, Auckland, 1061

PO BOX 14543 Panmure, Auckland, 1741 New Zealand Ph +64 9 579 1990

sales@eurotec.co.nz

www.eurotec.co.nz