



*People and technology
you can rely on™*



Sustainability standards place a high demand on facility managers to maintain a delicate balance of energy efficiency, client comfort, and environmental impact.

The ease of use, versatility, and resilience of the Reliable Controls system allows building operators to achieve that balance.

Recreation Solutions

The Coral Leisure Centre is located in Wicklow, about a 40-minute drive, South of Dublin, Ireland. The facility has a 25-meter, deck-level swimming pool and a 9-meter learner pool, along with a sauna and a steam room. It also offers a fully equipped gymnasium and an aerobics studio.



wicklow.coralleisure.ie/

building performance



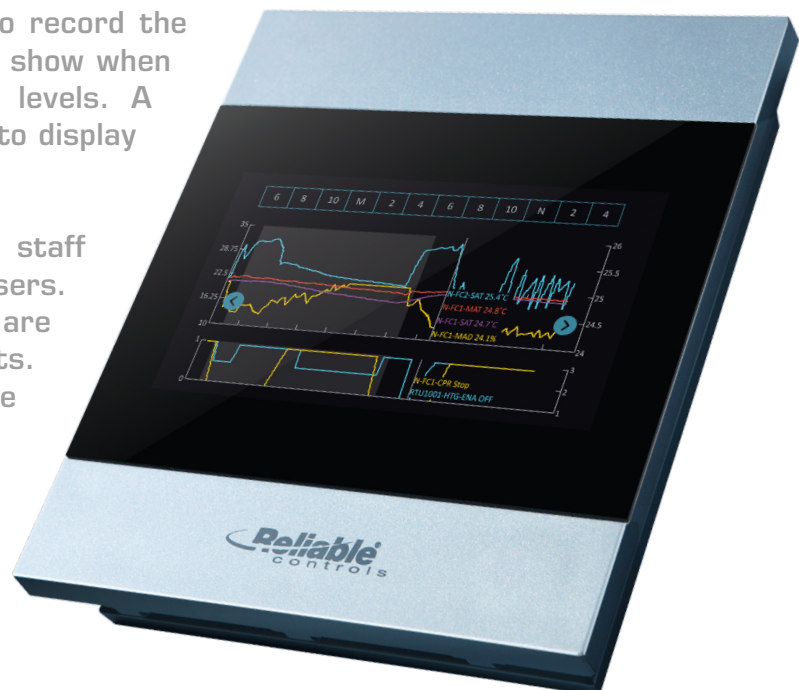
Reliable Controls Authorized Dealer, LCS Control Systems, completed this project for the Coral Leisure Centre, updating the building's air handling system and adding monitoring for gas and electricity usage.

The Building Automation System (BAS) controls the HVAC for the centre. The temperature and humidity levels in the swimming pool and changing areas are controlled to maintain the required setpoints through the air handling units' fan speeds, heating valves, and mixing dampers. Air velocity sensors are also mounted in the supply and return ducts to ensure that the required air changes per hour are maintained.

Gas and electricity meters are monitored to record the energy usage of the building, with alarms to show when the energy usage goes above the normal levels. A combination of line and bar graphs are used to display the information to staff.

The MACH-ProWebSys™ controller allows staff to access the BAS through their web browsers. MACH-Stat™ and MACH-ProView™ controllers are installed for local monitoring and adjustments. External access to the system is also available to staff for offsite monitoring.

MACH-ProView LCD with TRENDview



Better by design™



PROJECT TYPE:

Retrofit

INSTALLATION TYPE:

Air Handling

Utility Metering

EQUIPMENT INSTALLED:

MACH-ProWebSys™

MACH-Stat™

MACH-ProView™

MACH-ProZone™

INTEGRATION:

BACnet®

NETWORK:

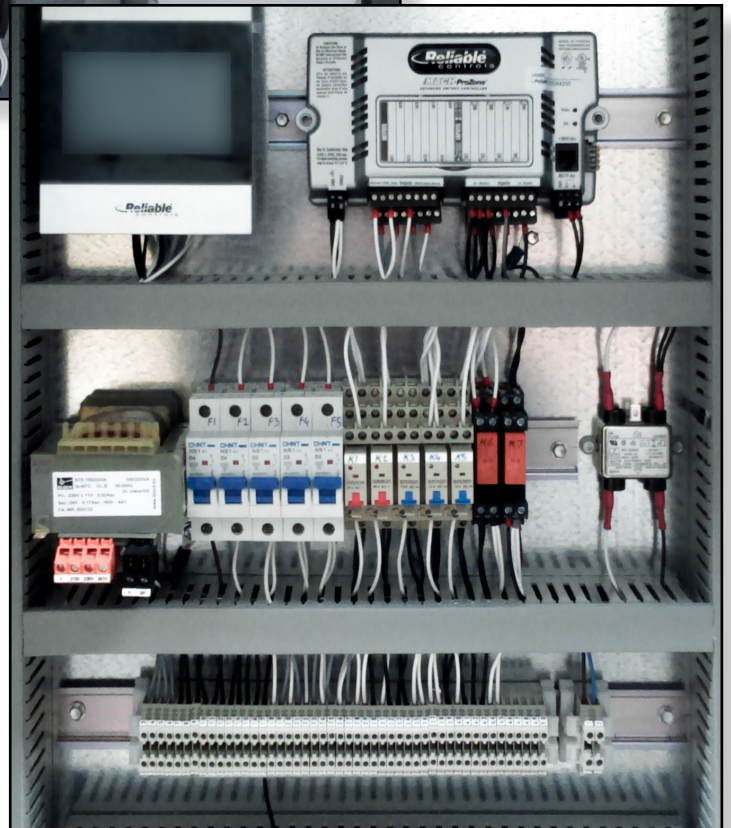
EIA-485

Ethernet/IP

RELIABLE CONTROLS®

AUTHORIZED DEALER:

LCS Control Systems



Coral Leisure Centre mechanical panels with Reliable Controls equipment as listed on the left.

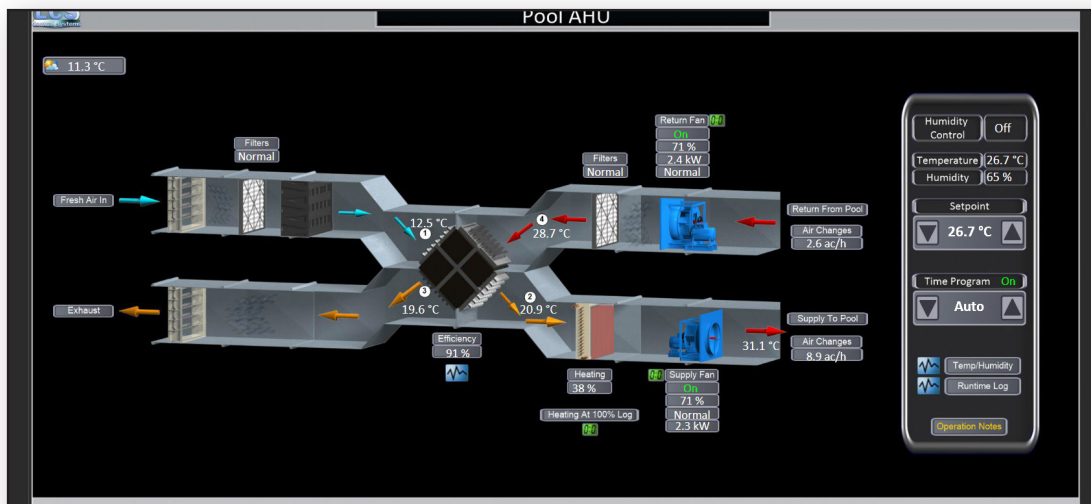
Coral Leisure Centre
User interface graphics as created
by LCS Control Systems.



Energy Dashboard



Metering Report Screen

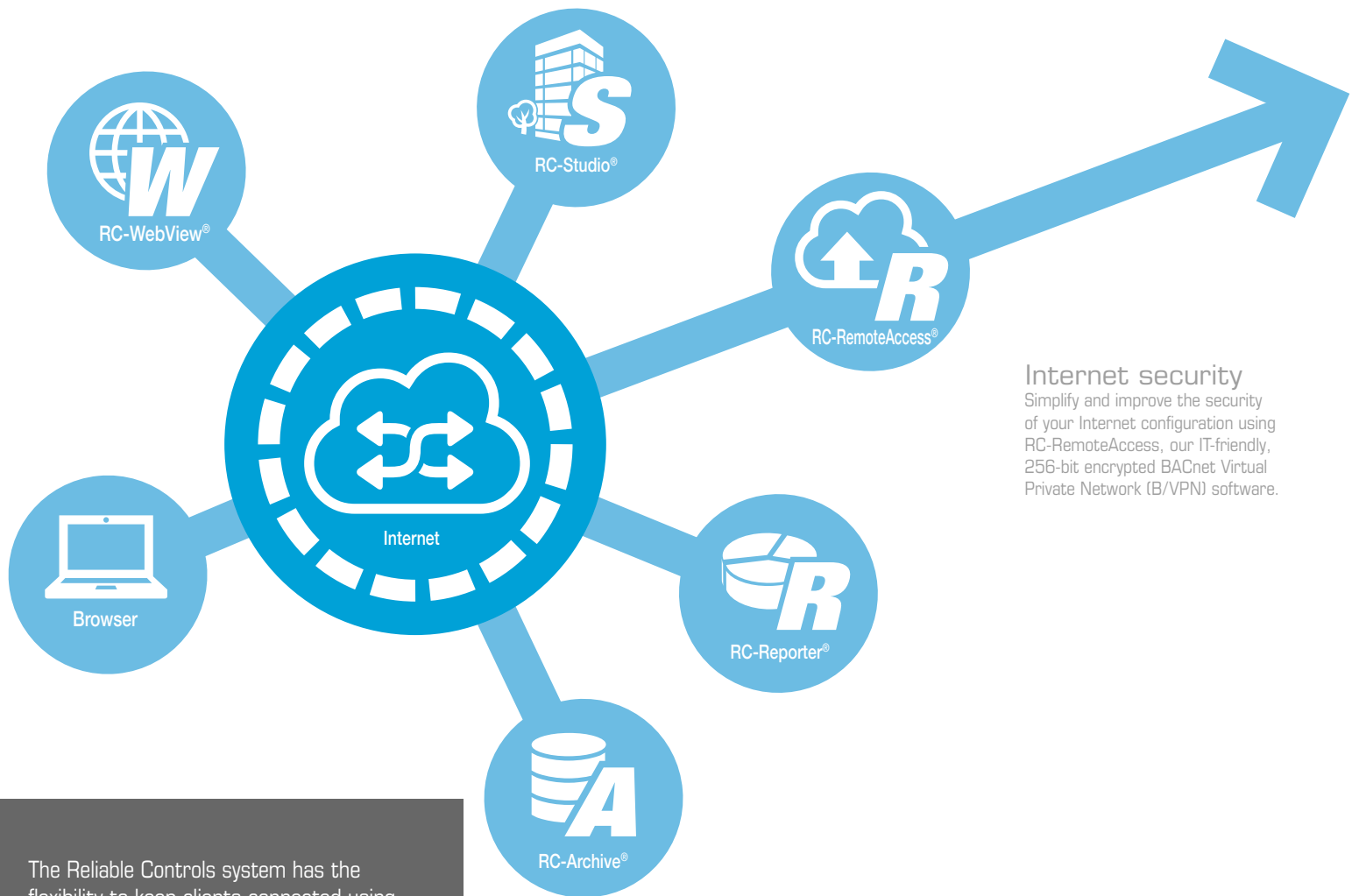


Air Handler Unit (AHU) Mechanical System User Interface

network flexibility

Internet-connectivity

Monitor your buildings from anywhere in the world using RC-Studio, a BACnet Advanced Operator Workstation (B-AWS), any standard web browser connected to RC-WebView, a MACH-ProWeb controller, or the myControl app on a mobile device.



Internet security

Simplify and improve the security of your Internet configuration using RC-RemoteAccess, our IT-friendly, 256-bit encrypted BACnet Virtual Private Network (B/VPN) software.

The Reliable Controls system has the flexibility to keep clients connected using the latest technologies, and the resilience to be effective for the life of the equipment controlled.

Every controller manufactured by Reliable Controls contains a BACnet communication stack on board and is BACnet Testing Laboratory listed for quality assurance. Reliable Controls provides an industry-recognized, 5-year warranty on all programmable controllers.



Reliable Controls offers a complete controls solution that easily integrates with intelligent building technology. The company's products communicate using robust, industry-standard networks and protocols. The Reliable Controls system has the ability to grow with a facility and has the flexibility to serve multiple simultaneous operators from numerous points of secure access.



System Controls

MACH-ProWebCom™
in communication closet

MACH-ProSys™
in penthouse air handler



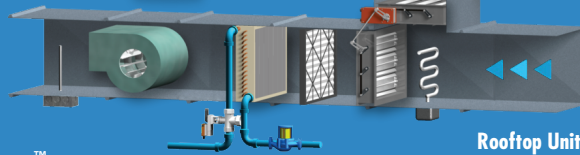
BACnet
Variable
Frequency Drive



MACH-ProZone™
exhaust fans



MACH-ProPoint™
expansion module



Rooftop Unit

MACH-ProWebCom™
in communication closet

MODBUS
Power Monitoring



Local Access

Using RC-Studio BACnet Operator Workstation with direct Ethernet or EIA-232 connection.

Zone Controls

MACH-ProCom™
in communication closet

MACH-ProAir™
on VAV box

MACH-ProZone™
on ceiling mounted heat pump



MACH-ProPoint™
expansion module



SMART-Sensor™
in office space



SMART-Sensor™
in office space



MACH-ProView™
in office space
using Wi-Fi



MACH-ProView™
in office space



SMART-Space Controller™
in office space

Central Plant Controls

MACH-ProCom™
in central plant with
expanded I/O Net



Chiller

The Reliable Controls system supports Internet Protocol, Ethernet, Master/Slave Token Passing, and Point-to-Point communications as well as Modbus, Simple Mail Transfer Protocol, and Simple Network Management Protocol.

The Coral Leisure Centre is an excellent demonstration of the power, flexibility, and sustainability of the Reliable Controls system.



25-meter, deck-level swimming pool

LCS Control Systems has been a Reliable Controls Authorized Dealer since 2005, offering outstanding customer service and quality installations.