

DARWIN CORPORATE PARK

DARWIN, NT, AUSTRALIA

CORPORATE

DARWIN'S NEW BUSINESS HUB

The Darwin Corporate Park is setting a new standard with its state-of-the-art, campus-style, premium quality commercial buildings and associated amenities, including restaurants, a cafe, and a gymnasium. The project is targeting a 5.5 Star NABERS Base Building Energy rating.

PROJECT DETAILS

Darwin Corporate Park was constructed in two stages: stage one consists of four buildings with 13,300 m² and stage two will see a total of eight buildings with 26,800 m².

The central thermal plant consists of three variable flow chillers, each with dedicated variable speed chilled and condenser water pumps. Each building incorporates two secondary chilled water pumps, which draw chilled water from the system to meet the demands of the individual buildings. The space is serviced by 22 AHUs, each fitted with BACnet[®] energy control valves providing independent flow control, power (kWR), and energy data (kWh). The AHUs distribute air to the 230 VAVs, ensuring tight, independent control of each zone.

The control system is based entirely on BACnet and MSTP with fiber and copper segments to eliminate effects of lighting transients between buildings. BACnet is used to integrate third-party devices including chillers, variable speed drives, energy valves, and power meters.

The system includes RC-Archive[®], RC-Reporter[®], and RC-Studio[®] software, together which provide automated, monthly reporting of performance data for the thermal plant, cooling towers, pumps, buildings, and AHUs. The raw data is logged every fifteen minutes, including motor kW, AHU kWR, chiller kWR, electrical meters, flow, and entering and leaving temperatures, which are exported into a formatted workbook for review by the NABERS assessor and client.

To learn more about projects using Reliable Controls[®], visit www.reliablecontrols.com/projects/overview.



PROJECT TYPE:
New Construction

INSTALLATION TYPE:
Chiller, Power Monitoring, VAV, AHU

TOTAL AREA:
40,100 m² (431,636 ft²)

EQUIPMENT INSTALLED:
1 MACH-ProWebCom™
9 MACH-ProCom™
13 MACH-ProSys™
230 MACH-ProAir™
233 SPACE-Sensor Temperature™
RC-Archive[®]
RC-Reporter[®]
RC-Studio[®]

NETWORK:
EIA-485, Ethernet, Fibreoptic

INTEGRATION:
BACnet[®]

TOTAL SYSTEM POINTS:
1600 points

RELIABLE CONTROLS[®] DEALER:
ISAS - Integrated Switchgear & Systems Pty Ltd.

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