

# **CONNECTING A SMART CAMPUS**



Curtin University in Perth is Western Australia's most populous and culturally diverse university with Australia's third largest international student population. Curtin has been named the highest-ranking university in Australia for LGBTI inclusion in the workplace for three consecutive years at the national Pride in Diversity Awards.

Molex's partner, Shamrock
Electrics, has worked with
Curtin for well over ten years,
delivering electrical and
communications solutions, to
ensure that the infrastructure
supports the environmental,
power, communications, study,
research and socialisation needs
of staff, students and visitors.

# THE CHALLENGE

Whilst fulfilling these needs is a continuous project in itself, recent developments to Curtin University specifications, delivered by Shamrock, have included the use of Zone Cabling and Consolidation Points, a move from Cat5 to Cat 6 and Cat 6A cabling, and the preparation of the new Curtin University Midland Campus.

## THE SOLUTION

Moving to Cat 6 and Cat 6A

The use of Molex Cat 6A cabling by Shamrock, has allowed Curtin University to meet many of its communications ambitions.

At the University Cat 6 has allowed the support of speeds up to 10Gbps over distances of 37-55 meters, whereas Cat 6A supports 10Gbps up to 100 meters, making it the logical choice for many applications, including building automation, CCTV, access control, etc..

# **CUSTOMER PROFILE**

#### **COMPANY**

Curtin University, Australia

#### **TECHNOLOGY PARTNERS**

Shamrock Electrics

#### **INDUSTRY**

Education

## **PRODUCT NAME**

Powercat 6A LS0H U/FTP cable, MOD-Clip FTP, PowerCat 6A shielded 1U 24P Patch Panel.

#### **SOLUTION FEATURES**

Molex's PowerCat solutions have been developed with the highest performing capabilities in mind, with improved data transmission over higher frequencies and enhanced noise suppression. Cat 6 cables have a maximum length of 55 meters when used for 10GBASE-T, Molex Cat 6A cable offers enahnced alien crosstalk characteristics, allowing 10GBASE-T to be run for the same 100 meter maximum distance.

## **CASE STUDY**

These technology choices by Shamrock Electrics, in consultation with Curtin University, have played a significant role in the success of the infrastructure installation in the university's new medical teaching centre.

**Curtin University's new Midland Campus** is situated near the St
John of God Midland Public Hospital.
It is a three-storey facility with
approximately 3,000m², featuring
state-of-the-art learning and
teaching spaces.

Shamrock Electrics was selected to perform the install, because of their ten-year relationship with the university, their experience in both electrical and communications, and the quality of the work that they had previously performed at Curtin.

# THE BENEFITS

Maximising a smart campus by minimising IT footprint.

Among the myriad applications supported through the Molex infrastructure are CBUS lighting controls, centralised clocks, Wi-Fi Access Points, people-counters in lifts, and the entire security system embracing CCTV, door entry and call points. Call points integrate CCTV, voice and access, enabling remote staff to respond to an incident, so they can view the call point alarm, and allow or deny access according to what they see and hear.

The university enjoys a consistently high-performing network infrastructure capable of delivering a fast and efficient service to its staff and students. And the quality and reliability of Molex's solution has reduced IT service delivery costs significantly.

# molex

Trent Hackett, Electrical Supervisor, Shamrock Electrics, comments: "Molex has been a fantastic product to install within Curtin's new Midland Campus. The product is super reliable and easy to install for the installers as well as maintaining client satisfaction with the end product."









For more information on how Molex Connected Enterprise Solutions can improve the efficiency and physical security of your IT system, please visit us at www.molexces.com