

Application Note

DUNMAN HIGH SCHOOL, SINGAPORE



Number of Starter Panels :

- FCU for Server Room, LAN Rooms : 8
- Air Handling Unit : 16
- MV Fans : 28
- HR, Flush and Domestic Pumpsets : 4

Number of Networks :

- 2 x RS485 Network

This system implementation with two (2) RS485 network is perhaps the largest implementation for School projects.

The IP3 Starter Panels are programmed with Weekly 7-Day timer for automatic control of the equipment start and stop times following the school schedule.

Computer Rooms

Each Server and LAN Rooms are equipped with 2 x FCU. Each controlled by an IP3 Starter Panel, configured each for 12 hours operating time.

The IP3 Starter Panel is intelligent to detect adverse change in room temperature (Trip in Duty FCU and High Temp Status) and automatically operates the standby FCU.

This is to maintain optimum room temperature for proper operations of the data centre.

Project Scope :

Design, supply, testing, commissioning and maintenance of Air-Conditioning, Mechanical and Ventilation (ACMV) Starter Panels, Touch Screen Panel.

Commissioned in 2008.

Description Of System Architecture

The Building Automation System of the School consists of the Master Panel (equipped with Panasonic FPG Master PLC with 10" Color Touch Screen) and two networks of IP3 Starter Panels for ACMV equipment (FCU, AHU, MV and Pump Sets).

The Monitoring and Control of the ACMV system is from the Master Panel.

