

CNE DAY SEMINAR ON
"LIGHTNING PROTECTION FOR
EQUIPMENT BASED ON MS IEC 62305
PART 4, DESIGN OF CAPACITOR BANKS
FOR BUILDINGS AND FACTORIES
BASED ON MS IEC 60831 PART 1 & 2,
ATS BASED ON MS IEC 60497-6-1 &
MICROPROCESSOR BASED GENERATOR
AND ATS CONTROLLES"

Organised by:

Electrical Engineering Technical Division, IEM In collaboration with Wise Pro Sdn. Bhd.

SEMINAR DETAILS



12th Nov 2025 9am - 5.30pm



Sheraton, Four Points, Puchong







Mr. Ng SF

Mr. Ritesh Lutchman

TOPIC COVERED

- Lightning Protection based on MS IEC 62305 –
 Part 4 Protection of Equipment Surge Protection
 Devices for Power and ELV services
- Low Voltage Capacitors based on MS IEC 60831
- Automatic Transfer Switch based on MS IEC 60947-6-1
- Microprocessor based controllers for ATS and Generators

Synopsis

Lightning Protection System, Surge Protection Devices (SPD), Power Factor Correction, Emergency Power Supply System, Automatic Transfer Switch (ATS), microprocessor based ATS controllers are essential building services to ensure safety, reliability, functionality and efficiency of a building. This seminar covers the design, installation, test and maintenance aspects, with case studies.

Registration Fees

IEM Member RM50.00

IEM Non Member RM100.00

BEM Approved CPD Hours: Applying



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Programme

Morning Sessions	
Time	Contents
9:00am to 10:30am	Workshop on Protection against Lightning based on MS IEC 62305 parts 1-4 - Electrical and Electronics System Surge Protection Devcies for LV and ELV Systems How to select Surge protection devices? Rating based on MS IEC 62305-4 standard Short Circuit Protection Protection for SPD
10:30am to 11:00am	Tea Break
11:00am to 12:30pm	Workshop on Design of Capacitor banks for buildings and factories based on MS IEC 60831 Parts 1 & 2 How to design capacitor banks? How to maintain and test Capacitor Banks? Capacitor banks installation guidelines. Harmonics and capacitors. Use of SVG for PF correction and Active Harmonic Filters. Use of hybrid Capacitor Bank and SVG system for PF correction. Case Study: Low PF when exporting solar kW for self consumption.
12.30pm to 13.30pm	Lunch
Afternoon Sessions	
13.30pm to 15.00pm	Selection of ATS based on MS IEC 60497-6-1 Utilization category (ATS sizing) ATS Protection (Fault Free Zone) ATS Controller characteristics Various ATS tyes and description (Open Transition, Closed Transition, Withdrawable Type ATS, ATS with Bypass capability etc.)
15.00pm to 15.30pm	Tea Break
15.30pm to 17.00pm	Microprocessor based generator and ATS controllers. Advantages compared to timers and relays systems. Single running generators controllers. Paralleling of generators. Synchronisation and load sharing. Technical applications and case studies for application of generator paralleling controllers.

Speaker's Biodata

Mr SF Ng:

Mr SF Ng is currently the sales and marketing engineer at Wisepro Sdn Bhd. He has been working in the industry for the past 10 years and has gathered great experience in the design, installation, troubleshooting and site works for the industries mentioned above. He has also received extensive training on the Lightning Protection at Dehn headquarters in Germany, power factor capacitors, reactors and harmonics at Shizuki headquarters in Japan and ATS applications and troubleshooting at Vitzrotech headquarters in Korea. He graduated from the University of Hertfordshire with a Master's Degree in Automotive Engineering.

Mr Ritesh Lutchman:

Mr Ritesh Lutchman is currently the Senior Sales and Marketing Manager at Wisepro Sdn Bhd. He graduated from the University of Cape Town with a Master's Degree in Electrical Engineering. He has been working in the industry for the past 15 years and has gathered great experience in the design, installation, troubleshooting and site works for the industries mentioned above. He has also received extensive training on the Smartgen controllers at Smartgen headquarters in Zhengzhou, Lightning Protection at Dehn headquarters in Germany, power factor capacitors, reactors and harmonics at Shizuki headquarters in Japan and ATS applications at Vitzrotech headquarters in Korea.