



sunlightvietnam.com.vn

CONTACT

We'd love to see you at Sunlight



Tel: +84 274 3743 505



Hotline: +84 919 698 110



20 Doc Lap Ave., VSIP, Binh Hoa,
Thuan An, Binh Duong, Vietnam



www.sunlightvietnam.com.vn



SUNLIGHT

A CHINT COMPANY

Let there be light



ALL ABOUT SUNLIGHT

Smart Transformation - Product - Process - People



CONTENTS

01

GENERAL INFORMATION

Introduction
Business Activities
Mission, Vision & Core Values
Quality Commitment
Business Segment
Certification
Milestone
Organization Chart



02

OUR PRODUCT

Technical Characteristics
MSB
MCC
DB & SUB DB
Consumer Unit
Weather-proof Panel
Fire Pump Control Panel
Others



SUNLIGHT

A CHINT COMPANY

03

SALIENT FEATURES OF MSB

Panel Monitoring System
Revit Software
3D Drawing
Steel Sheet & Painting Procedure
Busbar
And More



04

OUR PRIDE

Residential
Commercial
Industrial
Infrastructure
Institution
Oil Gas & Data Center



GENERAL INFORMATION

INTRODUCTION

SUNLIGHT, a bespoke name for switchboards, distribution and control panels of global standard.

Sunlight Electrical Vietnam (SEV) was established in 1997 as a subsidiary company of Sunlight Singapore with over 50 years of experience in the field of designing and manufacturing electrical panels.



BUSINESS ACTIVITIES

Specialist in low voltage electrical distribution systems for Residential, Commercial, Industrial, Oil & Gas and Data Center segments.



Design and manufacture low voltage type-tested assemblies (ASTA-certified) up to 8100A.



Servicing, Testing & Commissioning of low voltage switchboards.
Project management.



» OUR VISION AND MISSION

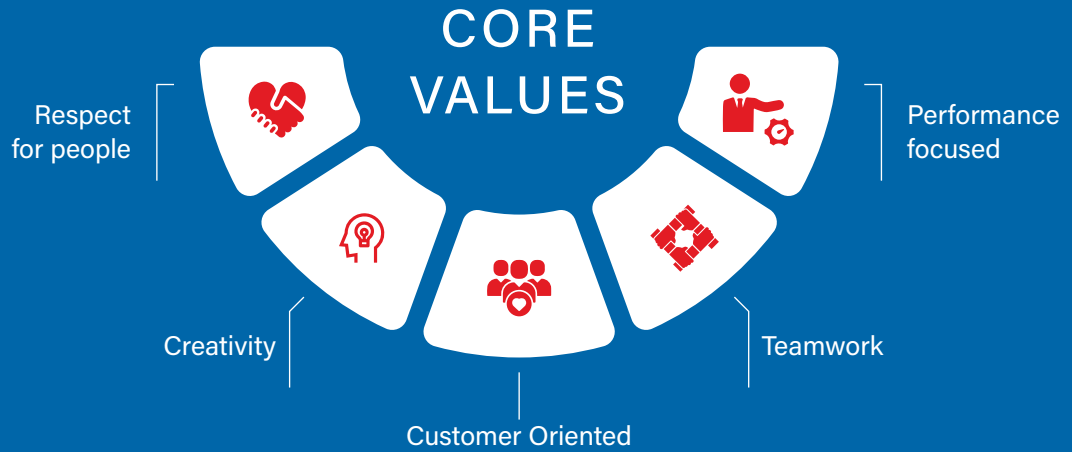
VISION

To be a leading regional manufacturer of electrical switchgears by providing products with the highest level of technical excellence and reliability, coupled with responsive, flexible and cost-competitive services to ensure total customer satisfaction.

MISSION

- Expand and grow market share
- Create positive impressions through good service
- Build a professional, competent and self-motivated team





One of the core values that have created Sunlight's reputation and prestige is a team of skillful and dedicated workers. Sunlight is proud of having many long serviced workers who have been with Sunlight for more than 10 years or even 25 years, together with sunlight to conquer challenges and achieve many successes.





QUALITY COMMITMENT

Sunlight factory is located in Vietnam Singapore Industrial Park 1 (VSIP1), Binh Duong Province.

We follow strictly our ISO 9001 and Type Test – ASTA, KEMA... (IEC 61439-1,2) regulations in design and production. The raw materials used are of highest quality and compliance with IEC 61439-1 & 2.

The manufacturing process of SEV follows strictly our ISO procedures in order to assured our valued customers of our consistent quality. Every steps of our manufacturing processes are monitored, and QA assessed by our QA/QC Department. Production management team works closely with groups of Designers and Engineers in order to produce the best quality products.



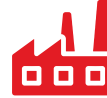
BUSINESS SEGMENTS



Residential



Commercial



Industrial



Public Institution



Infrastructure



Oil - Gas &
Data Center



CERTIFICATION



ISO 9001:2015



Singapore Green Building Product



ARC – Test (4000A)



IP 55 & 65





Sunlight has tested the LV Switchgear and Control gear to IEC 61439-1 & 2 requirements.

LV Switchgear and Control gear: 250A, 400A, 630A, 800A, 1000A, 1600A, 2500A, 3200A, 4000A, 5000A, 6300A, 8100A.

Type-tested to IEC 61439-1 & 2 with:

CHINT

ABB

Schneider
Electric

SIEMENS

MILESTONE

For half a century, Sunlight has harness latently the Founder's vision, innovation and digital-fortified transformation that the simple consumer units evolved to smart panels that now also serves data centers with wider product range.

Company Founded

1970



Sunlight Electrical was first established in 1970 as an electrical wiring company.

1976



Sunlight specialised into LV Switchgear manufacturing.

Horizontal and Vertical Development

1980s - 1990s



The rising demands from the HDB flats. Sunlight shifted to larger scale factories.



In 1986, Sunlight was the first to use CNC turret punch machines in switchboards fabrication in Singapore and completed many key projects in variety of segment.

SUNLIGHT HISTORY

Integration and Upgrading

1997



Sunlight Electrical awarded ISO9000 certification by the Productivity and Standards Board of Singapore (PSB). Sunlight incorporated Sunlight Electrical (Vietnam) Co., Ltd

2001



Achieved full range of type-tested assemblies certificates enlisted as SIEMENS (SIVACON) partner.

2002



Established Sunlight switchgear sdn bhd (Malaysia)

2008



Achieved ISO 9001:2008

2010



Sunlight officially opens its latest headquarters as No. 1 Third Chin Bee Rd. The year coincides with Sunlight's 40th anniversary. This is also attainment of new IEC 61439-1 & 2 design verification. Enlisted as a distributor/partner for CHINT.

2011



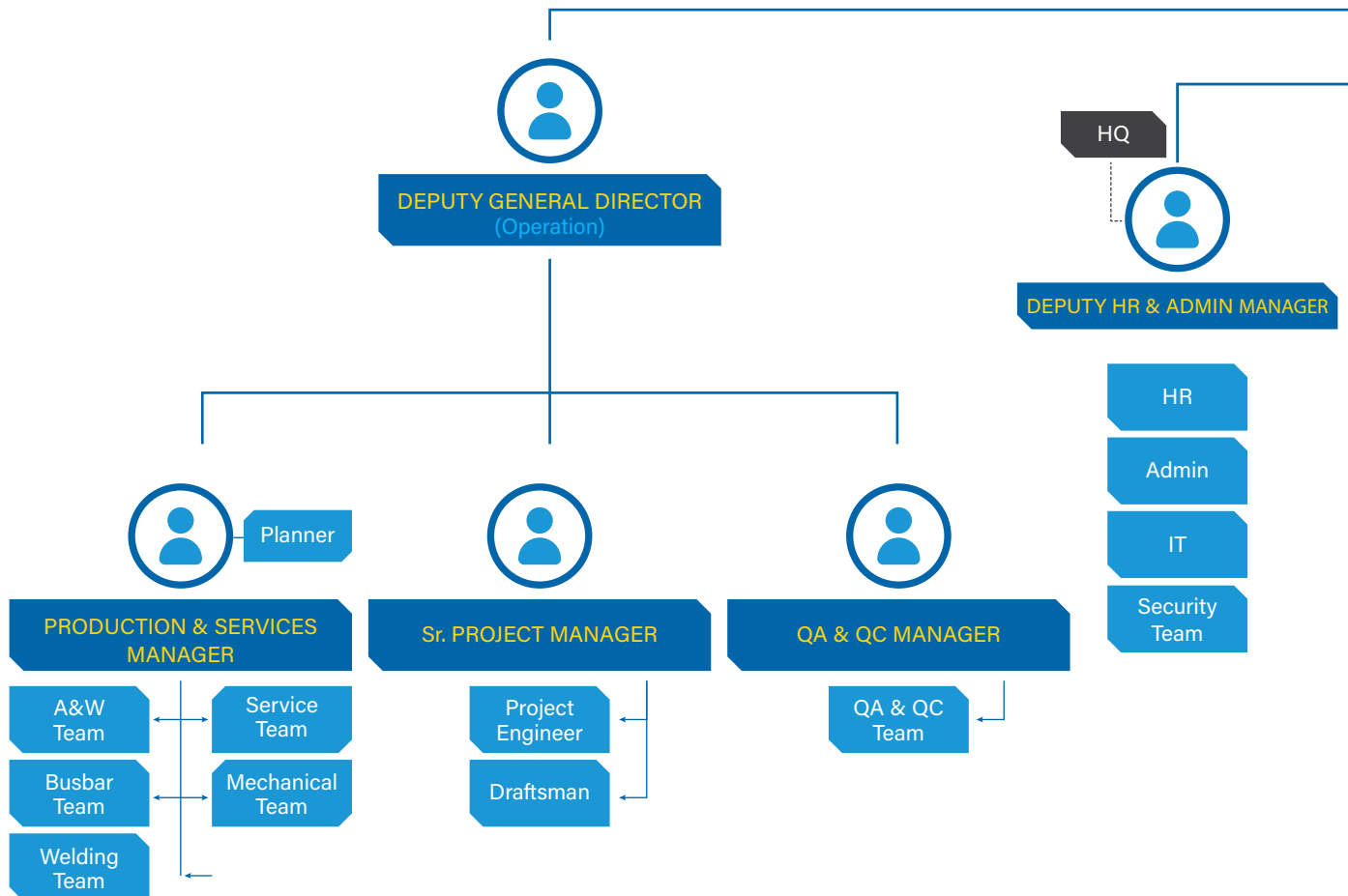
Sunlight has obtained Singapore Green Products Certification for FULL Sunlight Low Voltage product range by Building & Construction Authority (BCA)

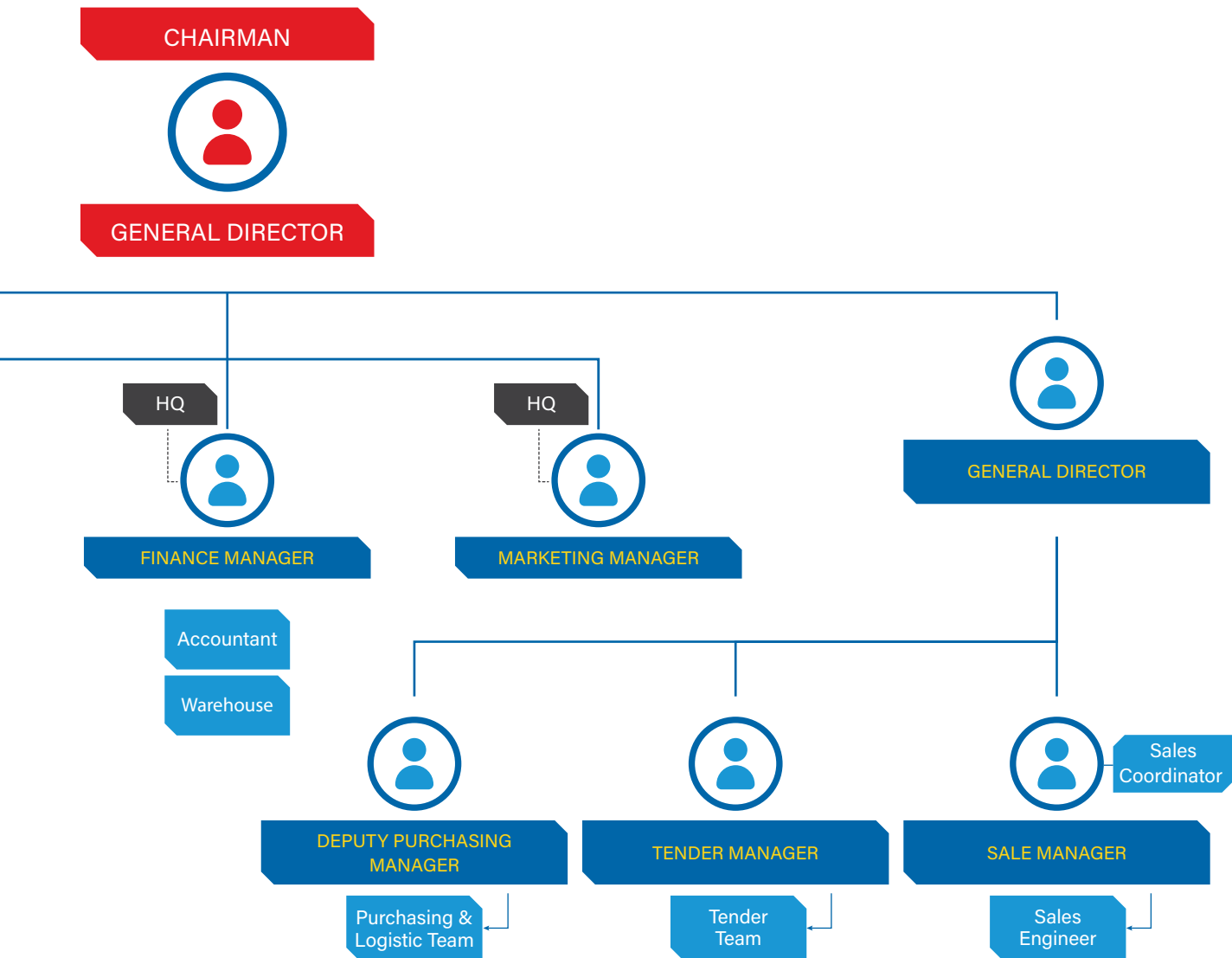
2012 2017



CHINT is approved by Housing Development of Singapore Signed an investment co-operation agreement with CHINT

SEV ORGANIZATION CHART







SINGAPORE

Facility size: 80.000 sq ft

Employee: >70



MALAYSIA

Facility size: 97.000 sq ft

Employee: >95



VIETNAM (SEV)

Facility size: 32.400 sq ft

Employee: >120

OUR PRODUCT



Quality



Reliability

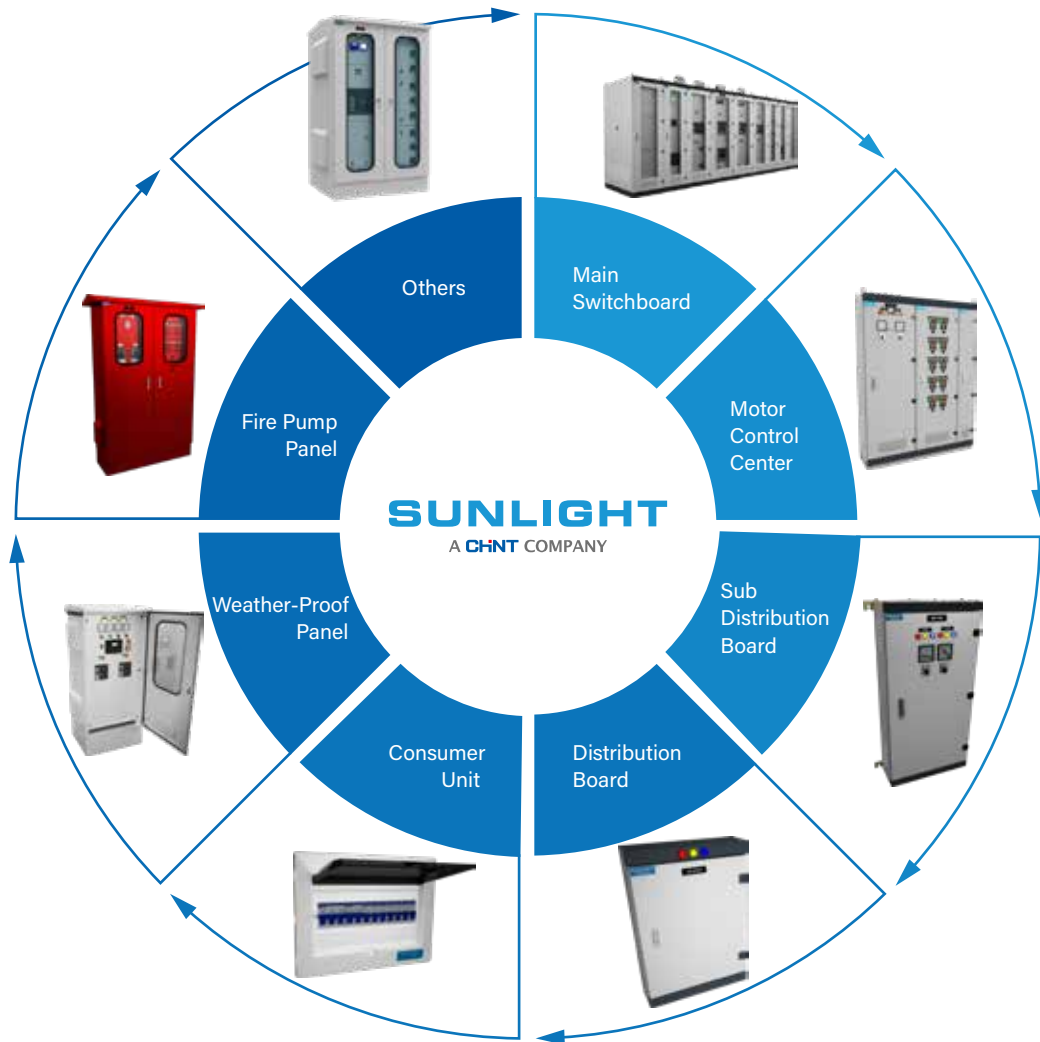


Safe



Green

PRODUCT LINE



TECHNICAL CHARACTERISTICS

Standards and specifications	Rated insulation voltage (Ui)	Up to 690V
	Rated operational voltage (Ue)	Up to 440V
	Rated impulse withstand voltage (Uimp)	8KV
	Overvoltage category	III
	Pollution degree	3
Main horizontal bus-bar	Rated current	Up to 8100A
	Rated peak withstand current (Ipk)	Up to 220 kA
	Rated short-time withstand current (Icw)	Up to 100 kA for 3s
Internal Separation	Form 1 to Form 4B	IEC 61439-1 & 2, IEC 60445
Surface treatment	Frame Parts	Electro Galvanized with powder-coating
	Enclosure	Electro Galvanized with powder-coating
	Doors	Electro Galvanized with powder-coating
Degree of protection	IEC 60529, EN 60529	IP 3X, IP 4X, IP 43, IP 55 and IP 65
Dimensions of switchboard	(H*W*D) It is be adjusted depend on single line diagram	Height: 2200 mm
		Width of Module: 550, 650, 800, 1050, 1300 mm
		Depth: 1050, 1250, 1350, 1450 & 1550 mm



1. MAIN SWITCHBOARD

IEC 61439-1&2

Technical characteristics		Remarks
Overall dimension	(H*W*D)	It will be adjusted depend on single line diagram
Frame thickness	1.5 & 2.0mm	EG steel
Sunlight proposal color	RAL7035 Texture/Smooth	Epoxy powder coating Thickness Min 50μm
Installation	Floor standing	Indoor/outdoor
Accessibility	Font & Rear	Rear by door or cover
Degree protection of enclosure	IP43, IP55	Indoor/outdoor
Internal separation	Up to Form 4B	Min Form 2X
Rated operate voltage	415V	For Low Voltage system
Rated insulation voltage	690V	
Rated impulse withstand voltage	8kV	
Rated Ampere	Up to 8100A	
Rated peak withstand current	Up to 220kA	
Short-circuit withstand strength	Up to 100kA for 3s	



2. MOTOR CONTROL CENTER

IEC 61439-1&2

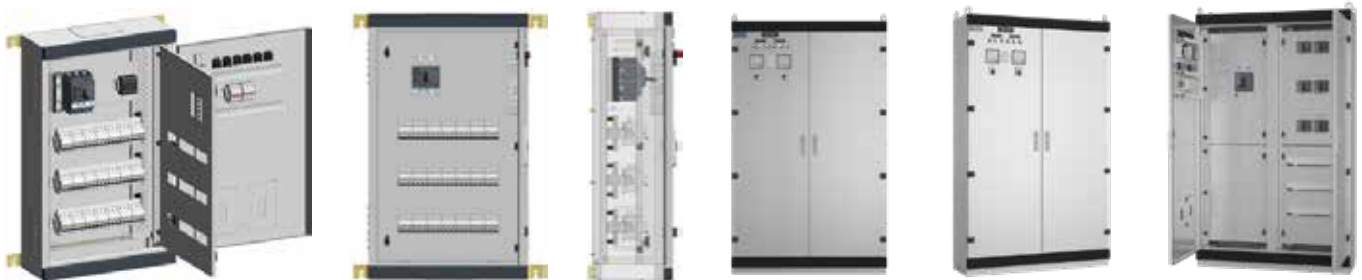
Technical characteristics		Remarks
Overall dimension	(H*W*D)	It will be adjusted depend on single line diagram
Frame thickness	1.5 & 2.0mm	EG steel
Sunlight proposal color	RAL7035 Texture/Smooth	Epoxy powder coating Thickness Min 50μm
Installation	Floor standing	Indoor/outdoor
Accessibility	Font & Rear	Rear by door or cover
Degree protection of enclosure	IP43, IP55	Indoor/outdoor
Internal separation	Up to Form 4B	Min Form 2X
Rated operate voltage	415V	For Low Voltage system
Rated insulation voltage	690V	
Rated impulse withstand voltage	8kV	
Rated Ampere	Up to 8100A	
Rated peak withstand current	Up to 220kA	
Short-circuit withstand strength	Up to 100kA for 3s	



3. SUB DISTRIBUTION BOARD

• IEC 61439-1&2

Technical characteristics		Remarks
Overall dimension	(H*W*D)	It will be adjusted depend on single line diagram
Frame thickness	1.2 & 1.5 or 2.0mm	EG steel
Sunlight proposal color	RAL7035 Texture/Smooth	Epoxy powder coating Thickness Min 50µm
Installation	Wall mounted Floor standing	Indoor
Accessibility	Front only or Font & Rear	Rear by door or cover
Degree protection of enclosure	IP43	Indoor
Internal separation	Up to Form 4B	Min Form 1
Rated operate voltage	415V	For Low Voltage system
Rated insulation voltage	690V	
Rated impulse withstand voltage	8kV	
Rated Ampere	Up to 1600A	
Rated peak withstand current	Up to 105kA	
Short-circuit withstand strength	Up to 50kA for 3s	



4. DISTRIBUTION BOARD

IEC 61439-1&2

Technical characteristics		Remarks
Overall dimension	(H*W*D)	It will be adjusted depend on single line diagram
Frame thickness	1.2mm	EG steel
Sunlight proposal color	RAL7035 Texture/Smooth	Epoxy powder coating Thickness Min 50µm
Installation	Wall mounted	Indoor
Accessibility	Front	
Degree protection of enclosure	IP43	Indoor
Internal separation	Up to Form 2X	
Rated operate voltage	415V	For Low Voltage system
Rated insulation voltage	690V	
Rated impulse withstand voltage	6kV	
Rated Ampere	Up to 250A	
Short-circuit withstand strength	Up to 40kA for 1s	

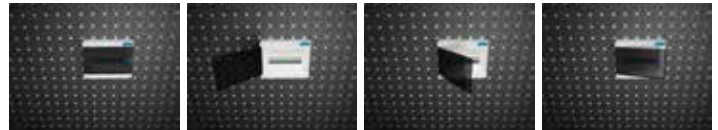


5. CONSUMER UNIT

IEC 61439-1&2

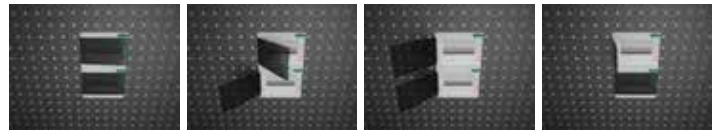
D1 SURFACE

- 1 **Product Code** : CU (1 Row - 16 Ways)
- 2 **Overall Dimensions** : W390 X H245 X D109 (mm)
- 3 **Power Coating**
 - **Color Code** : RAL 9003 - Indoor - Smooth
 - **Finishing** : Epoxy Powder Coating
 - **Thickness** : Minimum 50 Microns
- 4 **Metal Sheet** : Electro-Galvanised Steel Sheet
 - **Thickness** : 1.2mm
- 5 **Material Cover** : Polycarbonate PVC
- 6 **Ingress Protection** : IP31
- 7 **Location** : Indoor
- 8 **Accessibility** : Surface - Wall Mounted
- 9 **Cable Entry** : Top & Bottom



C2 CONCEAL

- 1 **Product Code** : CU (2 Rows - 16 Ways)
- 2 **Overall Dimensions** : W390 X H245 X D109 (mm)
- 3 **Power Coating**
 - **Color Code** : RAL 9003 - Indoor - Smooth
 - **Finishing** : Epoxy Powder Coating
 - **Thickness** : Minimum 50 Microns
- 4 **Metal Sheet** : Electro-Galvanised Steel Sheet
 - **Thickness** : 1.2mm
- 5 **Material Cover** : Polycarbonate PVC
- 6 **Ingress Protection** : IP31
- 7 **Location** : Indoor
- 8 **Accessibility** : Conceal - Wall Mounted
- 9 **Cable Entry** : Top & Bottom



6. WEATHER-PROOF PANEL

IEC 61439-1&2

Technical characteristics		Remarks
Overall dimension	(H*W*D)	It will be adjusted depend on single line diagram
Frame thickness	1.5 & 2.0mm	EG steel
Sunlight proposal color	RAL7035 Texture/Smooth	Epoxy powder coating Thickness Min 50μm
Installation	Wall mounted Floor standing	Indoor/outdoor
Accessibility	Front only or Front & Rear	Rear by door or cover
Degree protection of enclosure	IP55, IP65	Indoor/outdoor
Internal separation	Up to Form 4B	Min Form 1
Rated operate voltage	415V	For Low Voltage system
Rated insulation voltage	690V	
Rated impulse withstand voltage	8kV	
Rated Ampere	Up to 6300A	
Rated peak withstand current	Up to 220kA	
Short-circuit withstand strength	Up to 100kA for 3s	



7. FIRE PUMP PANEL

IEC 61439-1&2

Technical characteristics		Remarks
Overall dimension	(H*W*D)	It will be adjusted depend on single line diagram
Frame thickness	1.5 & 2.0mm	EG steel
Sunlight proposal color	RED - Texture/Smooth	Epoxy powder coating Thickness Min 50μm
Installation	Wall mounted Floor standing	Indoor/outdoor
Accessibility	Front only or Front & Rear	Rear by door or cover
Degree protection of enclosure	IP55, IP65	Indoor/outdoor
Internal separation	Up to Form 4B	Min Form 1
Rated operate voltage	415V	For Low Voltage system
Rated insulation voltage	690V	
Rated impulse withstand voltage	8kV	
Rated Ampere	Up to 6300A	
Rated peak withstand current	Up to 220kA	
Short-circuit withstand strength	Up to 100kA for 3s	



8. SYNC SWITCHBOARD

IEC 61439-1&2

Technical characteristics		Remarks
Overall dimension	(H*W*D)	It will be adjusted depend on single line diagram
Frame thickness	1.5 & 2.0mm	EG steel
Sunlight proposal color	RAL7035 - Texture/Smooth	Epoxy powder coating Thickness Min 50µm
Installation	Floor standing	Indoor
Accessibility	Font & Rear	Rear by door or cover
Degree protection of enclosure	IP43	Indoor
Internal separation	Up to Form 4B	Min Form 2X
Rated operate voltage	415V	For Low Voltage system
Rated insulation voltage	690V	
Rated impulse withstand voltage	8kV	
Rated Ampere	Up to 8100A	
Rated peak withstand current	Up to 220kA	
Short-circuit withstand strength	Up to 100kA for 3s	



9. KWH BOARD

- IEC 61439-1&2

Technical characteristics		Remarks
Overall dimension	(H*W*D)	It will be adjusted depend on single line diagram
Frame thickness	1.5 & 2.0mm	EG steel
Sunlight proposal color	RAL7035 - Texture	Epoxy powder coating Thickness Min 50µm
Installation	Floor standing	Indoor/outdoor
Accessibility	Font only or Font & Rear	Rear by door or cover
Degree protection of enclosure	IP43	Indoor/outdoor
Internal separation	Up to Form 4B	Min Form 1
Rated operate voltage	415V	For Low Voltage system
Rated insulation voltage	690V	
Rated impulse withstand voltage	6kV	



10. SOLAR SWITCHBOARD

IEC 61439-1&2

Technical characteristics		Remarks
Overall dimension	(H*W*D)	It will be adjusted depend on single line diagram
Frame thickness	1.5 &2.0mm	EG steel
Sunlight proposal color	RAL7035 - Texture/Smooth	Epoxy powder coating Thickness Min 50µm
Installation	Floor standing	Indoor/outdoor
Accessibility	Front only or Font & Rear	Rear by door or cover
Degree protection of enclosure	IP55	Outdoor
Internal separation	Up to Form 4B	Min Form 2X
Rated operate voltage	415V	For Low Voltage system
Rated insulation voltage	690V	
Rated impulse withstand voltage	8kV	
Rated Ampere	Up to 8100A	
Rated peak withstand current	Up to 220kA	
Short-circuit withstand strength	Up to 100kA for 3s	



11. TAP-OFF PANEL

IEC 61439-1&2

Items	Description	Remarks
Overall dimension	(H*W*D)	It will be adjusted depend on single line diagram
Frame thickness	1.5 & 2.0mm	EG steel
Sunlight proposal color	RAL7035 Texture/Smooth	Epoxy powder coating Thickness Min 50µm
Installation	Wall mounted	Indoor
Degree protection of enclosure	IP43	Indoor



12. TEMPORARY PANEL

IEC 61439-1&2

Technical characteristics		Remarks
Overall dimension	(H*W*D)	It will be adjusted depend on single line diagram
Frame thickness	1.2 & 1.5mm	EG steel
Sunlight proposal color	RAL7035 Texture/Smooth	Epoxy powder coating Thickness Min 50µm
Installation	Wall mounted Floor standing	Indoor/outdoor
Degree protection of enclosure	IP43, IP55	Indoor/outdoor



13. MIMIC PANEL

• IEC 61439-1&2

Technical characteristics		Remarks
Overall dimension	(H*W*D)	It will be adjusted depend on single line diagram
Frame thickness	1.2mm	EG steel
Standard color	RAL7035 - Texture/Smooth	Epoxy powder coating Thickness Min 50µm
Installation	Wall mounted	Indoor
Accessibility	Font	
Degree protection of enclosure	IP43	Indoor

LED



HMI



14. KIOSK PANEL

IEC 61439-1&2

Technical characteristics		Remarks
Overall dimension	(H*W*D)	It will be adjusted depend on single line diagram
Frame thickness	1.5 & 2.0mm	EG steel
Standard color	RAL7035 - Texture/Smooth	Epoxy powder coating Thickness Min 50µm
Installation	Floor standing	Outdoor
Accessibility	Font & Rear	Rear by door
Degree protection of enclosure	IP55	Outdoor



SALIENT FEATURE OF SUNLIGHT MSB



PANEL MONITORING SYSTEM (PMS)



Allows to monitor the status of devices as well as basic energy data of the power system.

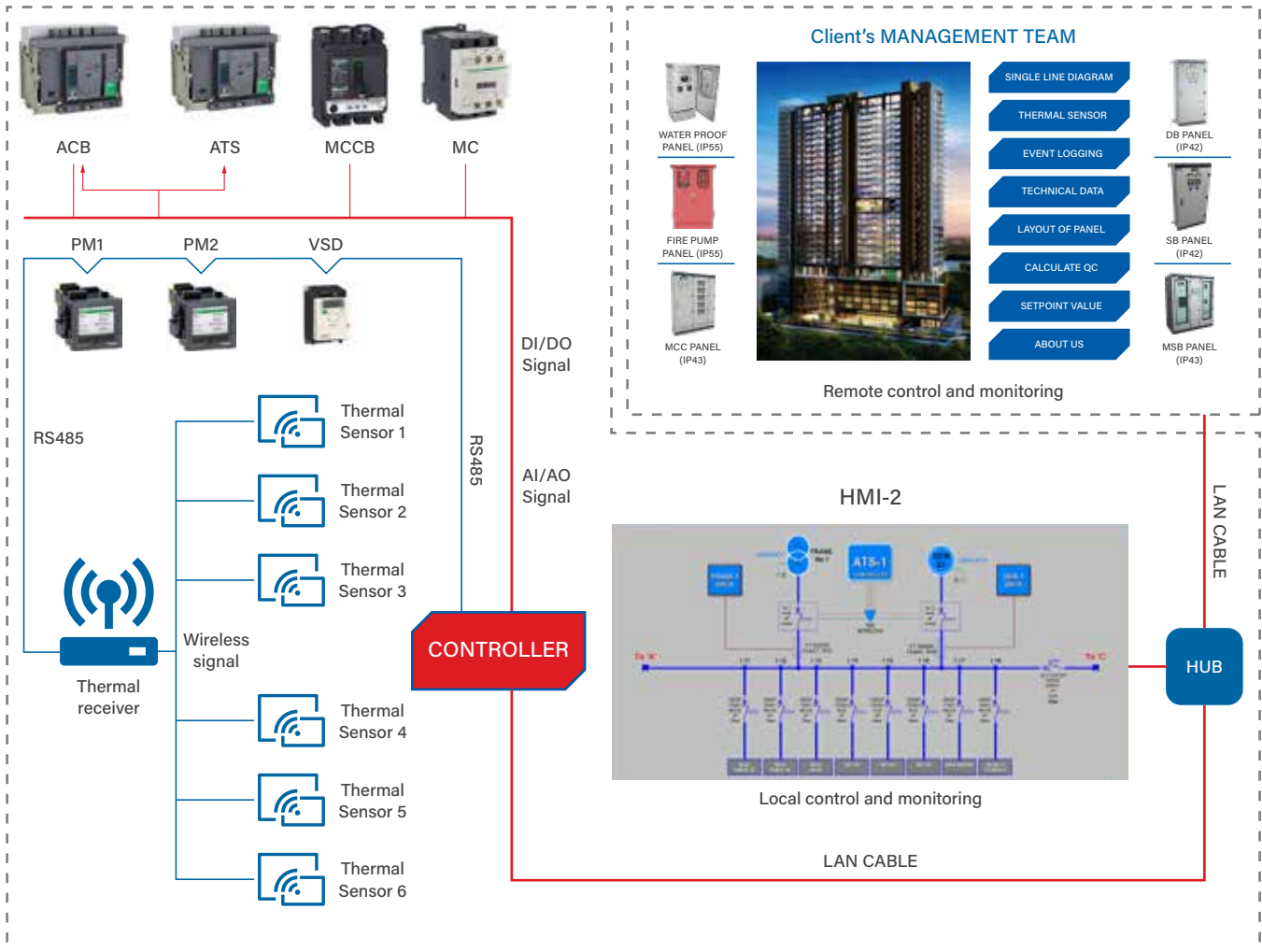
Temperature monitoring upto 125 Degrees celcius with thermal sensors at key locations of the main conductors of MSB.

Control the switching of the devices (optional) in the MSB via HMI (Touch Screen).

Ability to be linked directly to building management system (BMS ready).

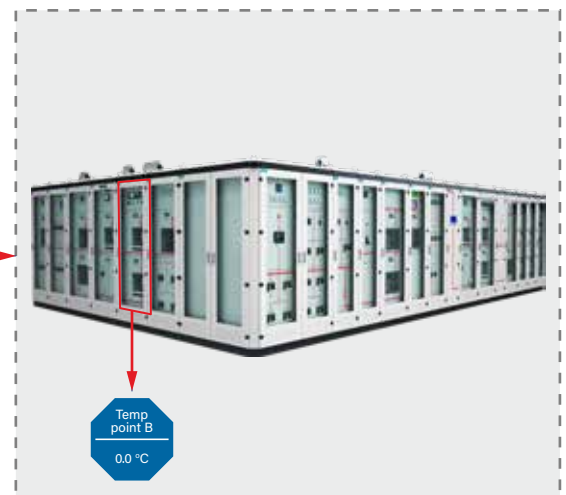
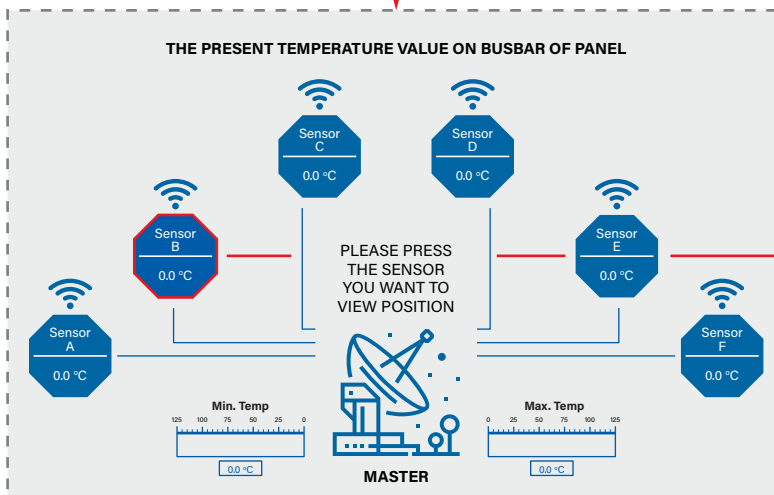
PANEL MONITORING SYSTEM "PMS-V2" FOR MSB

HMI-2

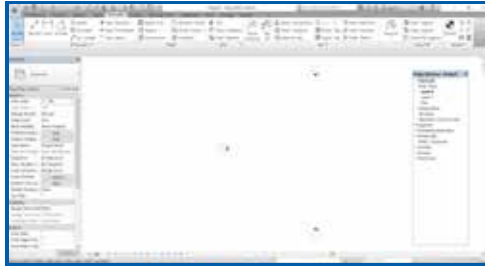


THE FUNCTION OF “PMS-V2”

To monitoring the temperature on busbar in side panel.



REVIT SOFTWARE



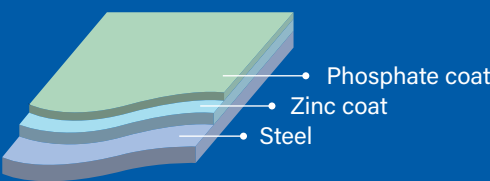
3D DRAWING



STEEL SHEET & PAINTING PROCEDURE

Material: Steel sheet (type: electrogalvanized steel sheet)

ELECTROGALVANIZED STEEL SHEET



Steel thickness: 1.2 ~ 2.5mm

- First layer is phosphate coat. It is making better powder coat steel.
- Second layer is zinc coat, it is protection oxidative for the steel inside.
- This type of steel sheet, Sunlight is using to make enclosure for panels, now.



Pre-treatment and painting process

Item	Type	Process	Information of powder coating		Method of coating	Painting Thickness (micro/coat)	Baking method	Color
			Brand	Type				
1	Indoor	Surface preparation	Degrease, rinse and dry					
		Finish coating	Tiger	Epoxy polyeste powder coating Texture with Indoor Type	Air Spray	Minimum is 50 (µm)	200 Degree for 10 minutes	RAL 7035
2	Outdoor	Surface preparation	Degrease, rinse and dry					
		Finish coating	Tiger	Epoxy polyeste powder coating Texture with Indoor Type	Air Spray	Minimum is 50 (µm)	200 Degree for 10 minutes	RAL 7035

COPPER BAR WITH TIN COATING



ORIENTAL COPPER CO., LTD. MILL TEST CERTIFICATE

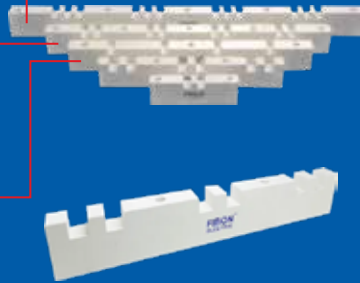
ORIGINAL

Certificate Number : OC-QC-0842/21 (ACCORDING TO STD. EN 10204/3.1)
Customer Name : SUNLIGHT ELECTRICAL (VIETNAM) CO. LTD.
Customer Address : 20 DAI LO DOC LAP VIETNAM-SINGAPORE INDUSTRIAL PARK THUAN AN DISTRICT S.R. BINH
Customer Order Number : BB03-21R1
Sales Order : 1080016454
Issued Date : 17.03.2021
Remarks :



Product Description	Reference Number	Weight (KG)	Dimension Check	Copper (%)	Electrical Conductivity (% IACS)	% Proof Stress	Tensile Strength (MPa)	Elongation (%)	Hardness	Bend Test
BAR - J15H3140 - CU-ETP - 1/2H - 1/4" x 3/4" - RD x 4000.00 mm	10	221.08	Passed	99.98	190.5	N/A	255.3	18.7	N/A	Passed
BAR - J15H3140 - CU-ETP - 1/2H - 1/4" x 1" - RD x 4000.00 mm	20	286.300	Passed	99.98	190.7	N/A	254.8	27.6	N/A	Passed

BUSBAR INSULATION SUPPORT



FIBON ELECTRICAL COMPOSITES

Fibon Electrical Insulation Composites (EIC) are made of innovative and specially formulated glass fibre reinforced polymer material. It is designed for the desire of the needs for high insulation property with flexural, and tensile strength and yet low in water absorption, which generally comply with the test under IEC 60439 and capable of withstanding explosions.



Grow-wire test at 960 Degree Celsius.



BUSBAR DESIGN & ARRANGEMENT



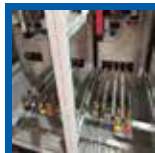
01

Phase & Neutral
Same Size



02

Neutral Link Beside 3P MCCB
→ Safety for Maintenance



03

Busbar Connection To Load
→ Easy for Cable Connection

OTHER



Socket protected by
RCBO for Maintenance

Safety Lock For Outer Door

OUR PRIDES

Approval of most consultant and owners in the region



RESIDENTIAL

SUNLIGHT

A CHNT COMPANY

MIDTOWN M8

Ho Chi Minh City,
Vietnam



G-HOME

Ho Chi Minh City,
Vietnam



27B OFFICE BUILDING

Ho Chi Minh City,
Vietnam



TOPAZ TWINS

Bien Hoa,
Dong Nai province,
Vietnam



INFINITY

Myanmar



CELADON CITY

Ho Chi Minh City,
Vietnam



RESIDENTIAL

PALM HEIGHT

Ho Chi Minh City,
Vietnam



THE EDGE

Ho Chi Minh City,
Vietnam



THE BRIDGE

Cambodia



HABITAT

Binh Duong Province,
Vietnam

AXIS

Cambodia



RIVIERA POINT

Ho Chi Minh City,
Vietnam



RESIDENTIAL

VIETEL BUILDING

Ho Chi Minh City,
Vietnam



DIAMOND ISLAND

Ho Chi Minh City,
Vietnam



ESTELLA HEIGHT

Ho Chi Minh City,
Vietnam



SERENITY SKY VILLAS

Ho Chi Minh City,
Vietnam



WILTON

Ho Chi Minh City,
Vietnam



ORCHARD PARKVIEW

Ho Chi Minh City,
Vietnam



COMMERCIAL



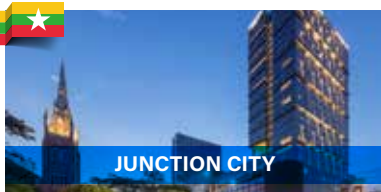
SULE SQUARE



THAMADA HOTEL



YOMA CENTRE



JUNCTION CITY



HO TRAM



HOI AN CONDOTEL



MONG TAY RESORT



MELIA CAM RANH



AN PHONG TOWER



SAIGON CENTRE



ALMA RESORT



HYATT RESORT

INDUSTRIAL



YAKULT
(BINH DUONG)



LIXIL
(BINH DUONG)



MAPLETREE
(BINH DUONG)



TOP GLOVES
(BINH DUONG)



VINAMILK
(BINH DUONG)



OLYMPUS FACTORY
(BINH DUONG)



AFC WAREHOUSE
(MYANMAR)



TAN CHONG MOTOR
(MYANMAR)

INSTITUTION



XUYEN A HOSPITAL
(TAY NINH)



HANH PHUC HOSPITAL
(BINH DUONG)



**UNITED NATIONS
INTERNATIONAL SCHOOL**
(HA NOI)



HOA SEN UNIVERSITY
(HO CHI MINH CITY)

INFRASTRUCTURE



DA NANG AIRPORT (DA NANG)



NOI BAI AIRPORT (HA NOI)

OIL - GAS & DATA CENTER



**SACOMBANK DATA CENTER
(HO CHI MINH CITY)**



**HCM STOCK EXCHANGE
(HO CHI MINH CITY)**



**SUPER DATA
(HO CHI MINH CITY)**



**GDS THANG LONG
(HA NOI)**

SINGAPORE PROJECTS



Singapore Changi Airport



Vivo City



9 Tai Seng Data Centre



Esplanade Theatre



Marina Bay Sands



Punggol Watertown



Sengkang General Hospital



Woodland Integrated
Healthcare Campus

QATAR PROJECT



Qatar Airways Simulator Building



Hamad Medical Center (HMC)



Common Sulfur (QATAR GAS)

UAE PROJECT

AL Reem Island Area 1, Sector 1,
Plot 2 Building 3, Retail Development



Dubai World Central International Airport



FACTORY TOUR



Sunlight Viet Nam factory



sunlightvietnam.com.vn

With Virtual Visit, very easy to visit us on our website

