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Allahabad	Berhampur	Goa	Kanyakumari	Nagerkoil	Sholapur	Vellore
Anantpuram	Bhilai	Gorakhpur	Kolhapur	Nasik	Srinagar	
Aurangabad	Bhopal	Gulbarga	Kota	Patiala	Sambalpur	
Amravati	Bilaspur	Jabalpur	Madurai	Pondicherry	Tirupati	
Akola	Bijapur	Jabli	Malda	Rajkot	Trichy	
Angul	Calicut	Jamshedpur	Mangalore	Rourkela	Trivandrum	
Bareilly	Cuttack	Jalandhar	Meerut	Salem	Udaipur	



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www.hplindia.com



Wire & Cables | Modular Switch | Solar



About **HPL**

HPL's vision of creating a niche, as a major player in India Electrical Industry with commitment to state-of-the-art technology & world class products.

HPL Group possess 6 most modern manufacturing units, ISO 9001: 2000; ISO 14001; OHSAS 18001 certified located at Gurgaon, Kundli, Sonepat, Panipat, New Delhi and Himachal Pradesh having 5,00,000 sq. feet covered area to manufacture products confirming to International and India standards.

HPL Products Profile has the following Strategic Business Units:

- LV Switchgears
- LV Protection Devices
- Metering and Energy Management Systems
- LED Lighting
- Luminaires
- Wire & Cables
- Electrical Wiring Accessories
- Solar

HPL Products are tested at CPRI, ERDA, ERTL, NPL etc. according to Indian Standards, whereas MCB's Rewireable Switches & Electronic Energy Meters carry ISI marking. Further HPL products have approvals from CPWD state PWD's, MES, BSNL & many more Institutional users.

HPL Group with Head Office at New Delhi has extensive Sales & Marketing Network of 90 Branch offices & Representative Offices, over 2000+ Authorised Dealers and 27000+ Retailers across country, who are committed to provide solutions and services to customer's delight. HPL is also exporting its products to Middle East, SAARC and European Countries.





















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Salient Features

- -/5A in class 0.5 & 1.0 accuracy.
- Suitable for 3 Phase 4 Wire LT Network.
- CT Primary Programing upto 6000A (For direct reading).

emfis - Digital Multi-Function Meter

- Three line LCD backlit display.
- Displays: Voltage, Current, Frequency, Power Factor, Power, & Trivector Energy.
- Three push buttons on the front panel for programming and scrolling.
- Maximum demand in kVA / kW with integration Period of 30 Minutes (Optional).
- RS485 Communication (Optional).



Salient Features

- Programmable CT secondary for 5A & 1A.
- Suitable for HT 3Phase 3 Wire /3 phase 4 wire (different model) application.
- Display in Scroll Mode: Active Energy kWh, Apparent Energy kVAh, Reactive Energy kVArh, Phase to Phase voltage, Instantaneous, Average, Maximum and total Current, Active Power kW, Reactive Power kVAr and Apparent Power kVA, Total Instantaneous Power Factor, Frequency.
- Rs485 Communication (Optional).



emfis - vif Digital Multi-Function Meter



Salient Features

- -/5A in class accuracy 1.0.
- Suitable for 3 Phase 4 Wire LT Network.
- CT Primary Programmable upto 6000A.
- Backlit LCD Display 17 parameters including: Phase to Phase voltage, Phase to Neutral Voltage, Instantaneous Current, Average Current, Maximum Current, Total Current, Frequency.

emfis - vie Digital Multi-Function Meter

Salient Features

- Three Line Backlit LCD Display.
- $\bullet \ \ \mathsf{Optically} \ \mathsf{Isolated} \ \mathsf{EnergyPulseOutput}.$
- RS485 MODBUS Communication.
- $\bullet \ \ \mathsf{Provision} \ \mathsf{for} \ \mathsf{Special} \ \mathsf{Screens} \ \mathsf{Shots}.$
- CT Secondary -/1A for -/5A (site selectable).
- Additional Parameters Power On Hour / Run Hours.





emfis - vifp Digital Multi-Function Meter

Salient Features

- -/5A in accuracy class 1.0.
- Suitable for 3 Phase 4 Wire LT Network.
- CT Primary Programmable upto 6000A.
- Three Line Backlit LCD display.
- Measures & Displays 39 parameters including: Phase to Phase Voltage, Phase to Neutral Voltage, Instantaneous, Average, Maximum and Total Current, Active Power kW, Reactive Power kVAr and Apparent Power kVA, Instantaneous and Total Power Factor, Frequency.



emfis vifpe - Digital Multi-Function Meter

Salient Features

- -/5A in accuracy class 1.0.
- Suitable for 3 Phase 4 Wire LT Network.
- CT Primary Programmable upto 6000A.
- Three Line Backlit LCD display.
- Measures & Displays 40 Parameters including: Active Energy, Phase to Phase Voltage, Phase to Neutral Voltage, Instantaneous, Average, Maximum and Total Current, Active Power kW, Reactive Power kVAR and Apparent Power kVA, Instantaneous and Total Power Factor, Frequency.
- RS 485 Communication (Optional).



emfis - Plus Digital Multi-Function Meter

emfis 67 /450 /45 /560 /45 387 /45

Salient Features

- Suitable for 3 Phase 4 Wire LT Network.
- Three line LCD backlit display.
- Displays: Voltage, Current, Power Factor, Power, Trivector Energy & THD.
- Last 6 month history parameters for kWh, kVAh, kVArh (lag, lead) & MD KW, kVA through Communication.
- Relay Output for V, I, Total kW, Total kVA, F, kW MD & kVA MD.
- Last 30 days Load Survey through communication.
- Last 10 Occ. / Res. event for each relay 1 & 2 through communication.

emfis - DC Digital Multi-Function Meter

Salient Features

- Displays: Voltage, Current, Power, Energy.
- RS485 MODBUS RTU Communication (Optional).
- Password Protected Programming.
- Backlit LCD type Display (16 X 2 line Dot Matrix).
- 6 Months History for kWh, MD kW, Channel Peak Load available on communication.
- Reverse Shunt Connection Indication.
- Reverse Voltage Connection Indication.
- Shunt Disconnection Indication.







Dual Source Meter

Salient Features

- One Meter records Active Energy of two different sources : Mains & Generator.
- Backlit LCD display.
- Suitable for 3 Phase 4 Wire Network.
- Accuracy class 0.5 & 1.0.
- Rs485 MODBUS communication (optional).

Dual Source Plus

Salient Features

- One meter records Active Energy of Two Sources.
- Measures over 45 Parameters including Voltage, Current, Frequency, kW, kVA; kVAr, PF, Active Energy for Mains, Generator and Total, MD in kW and kVA for Mains and Generator separately with date and time, Run Hours, Power on Hours.
- Relay outputs for V, I, kW, kVA, F, kW Demand, kVA demand.
- Last 6 months history parameters for kWh and MD through
- Last 10 event logging for Mains / Generator switching.



3Phase Panel Mounted Meter with LCD Display (CT 2E)



Salient Features

- CT Operated, -/5A in class 1.0 accuracy.
- CT Primary programmable upto 6000A (For Direct reading).
- No separate Auxiliary supply required.
- Low Power Consumption less then 1 watt per phase.
- Pulse Output.
- Anti tamper features.

3Phase Panel Mounted Meter with LCD Display (CT 2EA)

Salient Features

- Backlit LCD display.
- CT operated -/5A in class 1.0 accuracy.
- RS 485 communication.
- CT Primary programmable upto 6000A (For direct reading).
- Pulse output.





3Phase Panel Mounted Meter with Counter Display (CT2M)

Salient Features

- CT Operated, -/5A in class 1.0 accuracy.
- Available upto 800/5A (for direct reading) (Ref. Catalogue for available CT Ratio).
- No separate Auxiliary supply required.
- Low Power Consumption less then 1 watt per phase.
- Pulse Output.
- · Anti tamper features .

êbrit: Single & Three Phase Ammeter

Salient Features

- Push button based site programming of CT Ratio.
- Bright 4 Digit 14mm LED display.
- Colour indication for R, Y & B phases.
- Universal Auxiliary Supply: 80 to 300V AC/DC.
- Same model for A & kA.
- Auto scroll facility & scroll lock facility (For Three Phase meter).



êbrit : Single & Three Phase Voltmeter

Salient Features

- Push button based site programming of PT Ratio.
- Network selection for Star (3 Phases 4 wire) and Delta (3phase 3
- Bright 4 Digit 14mm LED display.
- Colour indication for R, Y & B phases.
- Universal Auxiliary Supply: 80 to 300V AC/DC.
- Same model for V & kV.
- Auto scroll facility & scroll lock facility (For Three Phase meter).

êbrit : PF Meter

Salient Features

- Measurement range Zero Log Unity-Zero Lead.
- Accuracy ± 0.01%.
- · Lag / Lead indication on the display.
- Bright 4 Digit 14mm LED display.
- Universal Auxiliary Supply 80 to 300V AC/DC.



êbrit: Kilo Watt Meter

Salient Features

- Push button based site programming of CT & PT ratio.
- Available in accuracy class 1.0 & 0.5 (Maintained through out the measurement range
- Measure range 0-3.000kW (Direct Measurement).
- Bright 4 Digit 14mm LED display.
- Universal Auxiliary Supply 80 to 300V AC/DC.



êbrit: Frequency Meter

Salient Features

- Measurement range 40.00 99.99 Hz.
- Accuracy Class 0.2 (Maintained through out the measurement range)
- Bright 4 Digit 14mm LED display.
- Universal Auxiliary Supply 80 to 300V AC/DC.



êbrit: Power Meter

Salient Features

- · Common Meter for kW, kVA and kVAr.
- User selectable measurement of kW/ kVAr/ kVA.
- Available in Class 0.5 & 1.0.
- Sustained accuracy through out the range.
- Universal auxiliary supply 80 to 300 V AC/DC.
- Push Button based site programming of CT Ratio.
- Bright 4 Digit 14mm LED Display.

êbrit: Multi Meter

Salient Features

- Three line LED Display multifunction energy meter.
- CT secondary -/1A or -/5A (site selectable).
- · Password protected programming.
- RS 485 MODBUS communication.
- Provision for special screens display.
- Measurement Range- 60V AC to 300V AC P-N.
- Pulse output.



Salient Features

- Microprocessor based intelligent auto switching control.
- Automatic C/K and rated step adjustment.

HPL - Power Factor Controller

- Automatic CT polarity correction.
- Display of power factor, current & total harmonic distortion of
- Programmable sensitivity.
- Last step can be used as alarm / fan output.
- Under / Over voltage alarm, compensate alarm & high harmonic



Trivector Meter

VERNINGER MICHIGAN DINE

Salient Features

- Range: LT-CT operated -/5A.
 - CT/PT operated -/5A & -/1A for HT application.
- Accuracy class 0.5 as per IS 14697 / CBIP 88 / IEC.
- Logging & display for tamper data.
- Measurement & recording of Trivector energy.
- Communication: Optical & Hardwired RS232.
- TOD, load Survey data, tamper information downloadable to CMRI through optical port.

Three Phase Dual Source Energy Meter

Salient Features

- One meter records Active Energy of two source.
- Optical port communication & RS485 MODBUS
- Mains / Generator selection through 240V AC / 24V DC
- · Indication for current reversal tampering and phase availability on the LCD itself.
- Indication on display to indicate the source in use .
- Load survey / Tamper logging available. • Ratings available: -/5A CT Operated 10-60A.



3Phase Electronic Energy Meter with LCD Display (Available with & without optical comm. port)

.....

Salient Features

- Accuracy Class 1.0 as per Is13779.
- Ratings: -/5A CT operated, 5-20A, 10-40A, 10-60A.
- · All standard anti tamper features provided.

Optional Features

- · Optical communication port.
- Logging and display of tamper data.
- TOD, load survey, tamper information downloadable to CMRI through optical port.
- · Display in absence of power supply.
- Suitable for AMR.

Din Rail Mounting Meters

Salient Features

- Current rating single phase 5-30A, three phase 10-60A & 20-80A & /-5A.
- Communication Modbus RTU for three phase & pulse output for single phase.
- Programmable CT ratio and Scroll lock.
- Suitable for dual source application (only three phase).







3Phase Electronic Energy Meter Counter Type Display



Salient Features

- Range 5-20A, 10-60A, -/5A Ct operated in class 1.0 accuracy as per IS 13779.
- Meter records correct energy with same accuracy under reverse current connection.
- LED indication for current reversal tampering provided.
- Phase available indication provided
- Anti tamper features.

Single Phase Electronic Energy Meter with LCD Display (Available with & without optical comm. port)

Salient Features

- Accuracy Class 1.0 as per IS13779.
- Ratings: 5-30A, 10-60A.
- All standard anti tamper features provided.

Optional Features

- Optical communication port / Rs232 Port.
- TOD, load survey, tamper information downloadable.
- CMRI through optical port.
- Display in absence of power supply.



Single Phase Electronic Energy Meter Counter Type Display



Salient Features

- Range 5-20A, 5-30, 10-40A, 10-60A, CT operated in class 1.0 accuracy as per IS 13779.
- Tamper indications provided.
- Phase available indication provided.
- Anti tamper features.

Net Meter for Solar Roof Top & Solar Plant Application

Salient Features

- Available in Single Phase & Three Phase Net Metering.
- Range: 5-30A, 10-40A, 10-60A, HT CT / LT CT, -/5A.
- 4 quadrant meter with pulse output LED's for kWh & kVArh.
- As per IS 13779 & IS 14697.
- Separate readings for Active Energy kWh, kVAh Import & Export.
- Net Energy kWh, kVAh with sign.





ABT Meter (Availability Based Tariff)

高/C

Salient Features

- As per IS-14697 & IEC 62053 accuracy Class 0.2 and 0.5.
- Four –quadrant metering for export & import.
- DLMS / COSEM open protocol support.
- Up to 8 tariffs per day.
- Up to 12 channel of load profile data and block load profile data.
- Multiple communication port such as optical, RS 232 & RS 485 port for remote reading & SCADA application.

Smart Meter

Salient Features

- Robust and Sleek design.
- · Variant: Single phase & Three phase.
- Communication: Two way, Open protocol (DLMS), GSM/RF.
- Internal relay for Remote Load disconnect/ Reconnect.
- Anti tamper and fraud detection.
- Security Password protected user login and parameter settings.
- Online data downloading through GSM/GPRS communication.



Prepaid Metering Solutions

Salient Features

- Available in single phase 5(30)A & 10(60)A, Three phase 10(60)A.
- Confirming as per IS 15884: 2010 with Class 1.0 accuracy.
- Suitable for dual source application.
- Transparent system for utility and end consumer.
- No worry of meter reading.
- Automatic Supply disconnection for zero or negative meter balance.
- $\bullet \ \ {\it Optional\ mobile\ billing\ software\ for\ bill\ generation}.$

LPR Zigbee Metering Solutions

Salient Features

- Available in Single Phase 5-30A, 10-40A & 10-60A.
- Available in 3 phase 10-40A & 10-60A.
- Energy Meter Based on IEEE 802.15.4.
 Automated device address management.
- Each meter aids transfer of data for self as well as neighboring meter.
- Wire less commissioning, network scalability features.









Salient Features

- No need of external CT, meter box and accessories.
- Wide current range, 40-200A.
- Thread-through meter- cable passes through meter.
- · Communication options-
- Optical Port
- Inbuilt GSM/GPRS Modem
- On Demand & Scheduled data transfer.

Automatic Meter Reading Solution

Salient Features

- High speed GSM / GPRS communication 9600 bps
- Suitable for remote reading application.
- On demand data transfer.
- Optional SMS facility for configured events.



Transparent Pilfer Proof Meter Box Salient Features

- Available for single & three phase variant both.
- · Variants available in push fit & hinge type.
- Made of UV stabilized transparent & FR grade engineering plastic.
- Extended optical port on top of ease of meter reading through CMRI without opening box.
- Extended push button for scrolling of display parameters .
- Confirming as per IS 14772 & type tested in NABL Lab.

Air Circuit Breaker

intelliPROTECT

Salient Features

- Range: 630A 6300A.
- Operational voltage upto 690V & even above on request.
- Icu 50kA to 120kA at 500Vac.
- Ics = 100% Icu throughout the range.
- Icw: 50kA to 100kA (for 1 sec).
- Customer oriented Trip Relay with advanced measurement functions & communication functions.
- Tested & certified as per IS/IEC 60947-2.



Salient Features

- Range 630A 2000A & Icu 50kA, 3P & 4P, Icw 50kA for 1 sec. at 500Vac. Fixed Type and Draw Out Type.
- LSIG Protection with Microprocessor at variable time delay.
- Digital display of current and voltage parameters.
- Short circuit protection starts from 131%.



Moulded Case Circuit Breaker

TAB[™]: Thermal Adjustable Breaker

Salient Features

- Conforms to IS/IEC 60947-2.
- Available in 1P, 2P, 3P & 4P Versions rated current from 10A-800A & breaking capacity (from 10kA to 65kA).
- 4P version available with neutral fully protected.
- Adjustability-offers close protection to different load condition.
- Line load reversibility, Low let through energy.
- Wide range of internal and external accessories.
- ROHS Compliant, also available for DC application.
- Single Pole MCCBs are available from 10A-250A with breaking capacity from 10kA-50kA, SP MCCBs from 63A-250A are available with thermal adjustable feature.



Salient Features

- Available upto 22 kW / 30 HP in two frame.
- Breaking capacity 25kA / 36kA.
- Clear indication of ON, OFF & Trip position.
- · Low let through energy.
- For Special motor starting condition (Starting time beyond 10 Sec & other specific condition) - please contact us.









Microprocessor MCCB

Salient Features

- Rated 25A-800A Breaking capacity 25kA/36kA/50kA/65kA.
- No of Poles 3/4.
- Overload protection ADJUSTABLE in the range 30% to 100% of In with variable time setting.
- Short circuit Protection ADJUSTABLE in the range 400% to 1000% of Ir with variable time setting.
- Ground Fault Protection ADJUSTABLE in the range 10% to 40% of In with variable time setting.
- · Communication Feature available.
- Suitable for DISCRIMINATION.
- NO EXTERNAL Power required for the electronic circuit.
- True RMS sensing for precise and RELIABLE protection.

MCCB Distribution Panel

Salient Features

- Range: 4, 6, 8, 10 & 12 ways.
- Incoming Upto 630A, Outgoing Upto 250A.
- No. of poles of MCCB 3 / 4.
- Multifunction Digital Metering Optional.
- Shrouded bus bar can withstand high fault currents.
- Provision for single Door / Double Door.



MCCB Enclosure

Salient Features

- MCCB conform to IS/IEC 60947-2.
- Current ratings from 16A 800A, 3P & 4P version.
- · Low let through energy.
- Breaking Capacity (kA): 10kA 65kA (with MCCB).
- Line Load Reversibility.
- Minimum maintenance, User friendly, robust & compact.
- Highly reliable tested solution.

Contactors & O\L Relays

Thermal Overload Relays

Salient Features

- Differential Bimetallic overload relays from 0.1 to 800A.
- Built in 1NO+1NC potential free contacts.
- Choice of Contactor or separate Mounting.
- Option of Manual / Auto or Remote Reset.
- $\bullet\,$ Sealable cover to avoid tampering, Trip indicator.
- Class 10A or Class 20.
- Site Mounted add on accessories.



Contactors

Salient Features

- Widest Range of 3P & 4P Contactors upto 800A.
- Control Contactor with option upto 12 contacts.
- Capacitor Duty Contactors upto 62 kvar.
- Highest Electrical Life upto 2.5 million operations.
- Site mounted add on accessories (Auxiliary Contacts, Mechanical Interlock, Surge Suppressor, Timer, Mechanical Latch Units).
- Type II Co-ordination.
- CE marked & UL Certified.

Motor Protection Circuit Breaker (Motocop)

Salient Features

- Wide range of MPCB from 0.1 to 80A.
- 22 Ratings in just 2 frames.
- Rotary Type Operation (Direct & Extended Handle).
- Protection against O/L, S/C & Single Phasing.
- Higher Breaking capacity upto 50kA, 480 VAC.
- Electrical / Mechanical Life 1 Million Operations.
- Suitable for Isolation & Type II Co-ordination.
- Ambient Temperature Compensated.Site Mounted add on accessories.



Submersible Pump Correction Pump

Salient Features

- Range-1HP to 40HP (DOL & Star Delta) in 2 Models.
- · Heavy Duty Contactors for longer life.
- Control Voltage- Phase (130 to 290V) or 3 Phase (280 to 440V).
- Short Circuit Protection MCB/MCCB (10kA) in Deluxe Model.
- Other Protections Single Phasing / Over Load / Unbalance Voltages / Reversal of Phases.
- Auto Manual Bypass Switch.
- Ammeter & Voltmeter with Selector Switch.
- LED indications for R, Y, B Phases & Pump ON/OFF.

AV Changeover Switch

HPL AV Onload Changeover Switch

Salient Features

- Range: 6 frame sizes, 63-3150A, 3 Pole & 4 Pole, IS 13947 part 3/93.
- Arc Chute plates to enhance contact life. 100% Neutral.
- Compact body of fiber glass, reinforced polyester resin.
- · High Mechanical & Electrical life.
- Total safety with Terminal cover, Source Separator and Phase Barrier as standard feature.
- Mounting possible in both horizontal and vertical position.
- Available in Open Execution and Sheet Steel enclosures.
- Prewired Auxiliary contacts upto 2NO NC.









Automatic Transfer Switch AV ATS

Salient Features

- Range 40A-630A, 4P, AC 23A, 3 frame sizes open executions in enclosures.
- Trip Safety as standard feature, CE marked, RoHS Compliant.
- Power monitoring- kWh, kVAh, kVAr, kVArh.
- User selectable RS232 & RS485 communications.
- Remote monitoring, Customer Oriented Controllers.
- Configurable over riding voltage parameters.
- Maximum spares for on site repair solutions.
- Programable Monitoring & Control.
- Auto DG Start Stop with Impluse & Continues Voltage.
- Configurable Digital Inputs and Outputs.

HPL - AV Switch Fuse Changeover

Salient Features

- Range: 125A-630A, 4 Pole, 415V AC as per IS 13947 Part 3/93.
- Arc Chute plates to enhance contact life. 100% Neutral.
- Body of fiber glass reinforced polyester resin.
- Prewired Auxiliary contacts upto 2NO NC.
- Protection against over current and short circuit faults by fuses of high rupturing capacity of 80kA rms.
- Total safety with Terminal cover, Source Separator and Phase Barrier as standard feature.
- Available in Open Execution / Sheet Steel enclosure.



312

HPL- AV On Load Bypass Switch

Salient Features

- Range: 125A 1600A, 4 Pole, 415 V AC as per IS 13947 Part 3/93.
- Arc Chute plates to enhance contact life. 100% Neutral.
- Switch is designed for specific need in IT industries where UPS and Servo stabilizer provides main source of supply.
- Prewired Auxiliary contacts upto 2NO NC.
- Available in Open Execution / Sheet Steel enclosure.
- Total safety with Terminal cover, Source Separator and Phase Barrier as standard feature.

HPL - AV Cubicle Load Break Switch

Salient Features

- Range: 63 3150A, 3 Pole & 4 Pole, 415 V AC as per IS 13947 Part 3/93.
- Arc Chute plates to enhance contact life. 100% Neutral.
- Prewired Auxiliary contacts upto 2NO N.
- Suitable for DC-23A, 260V, application without any derating.
- Available in Open Execution / Sheet Steel enclosure.
- Total safety with Terminal Cover, and Phase Barrier as standard feature.



LBS & SDF

LK - HPL Switch Disconnector Fuse

IS: 13947

Salient Features

- Range: 32A to 800A, TP, TPN & 4 Pole, 415V, 50Hz.
- Confirms to latest IS 13947-3 / IEC 947-3.
- Tested at CPRI, Bhopal for AC-23A duty.
- Multiple Roller Contact Mechanism for long life and better performance.
- Available in open execution and sheet steel enclosure.
- Available in BS & DIN type HRC fuse links.
- Excellent performance for capacitor duty applications also.

LK - HPL Load Break Switch (Isolator)

Salient Features

- Range: 32A -3150 TP, TPN & FP, 415V 50Hz.
- Confirms to IS 13947-3.
- Multiple roller contact mechanism for long life & better performance.
- Available in open execution & sheet steel enclosure.
- Excellent performance for capacitor duty applications also.



Fuse Switches

IS: 13703 CM/L-9100011387

HRC Fuse Link & Base-BS & DIN Type

Salient Features

- Range (DIN type Fuse Link & Base): 2 Amps to 630 Amps.
- Range (BS Type Fuse Holder): 20A to 125A.
- Breaking capacity>80kA at 415V, AC, 50 Hz.
- Front & Busbar Connection options for fuse Holders (of BS type).
- Conforms to IS: 13703 / 93 & IEC 269-1986.
- Low Watt loss.
- Tested at CPRI Bhopal.

HPL - LT Switchgear

Salient Features

Range: Rewireable Switch Fuse Unit
 : 16 Amps to 320 Amps
 Fuse Switch Unit
 : 63 Amps to 800 Amps
 Changeover Switches
 : 16 Amps to 2000 Amps

HPL Porcelain Fuse : 16 Amps to 320 Amps

Tested at CPRI Bhopal, IIT Kanpur, NTH Calcutta.

• Confirms to IS 13947-3 / IS 2086.





Protection



Osäfe MCB

Salient Features

- Range: 0.5Amp 63Amp in SP, SPN, DP, TP, TPN, FP.
- Specification: IS/IEC-60898-1.
- Rated Voltage: 240/415V AC, 50Hz.
- Contact position indicator red/green & Padlock/Sealing facility.
- Rated Breaking capacity 10kA & Energy Limit Class 3.
- Installation and removal of MCB without removing Busbar, as 3 position mounting clip makes it possible.
- Bi-connect termination on both sides & snap fitting on accessories.
- Cable termination capacity of wire upto 35sq.mm.
- Can be sealed with leads in the ON or OFF position.

Osäfe Distribution Board

Salient Features

- Available in SPN and TPN versions.
- Compact and aesthetically designed to meet the requirement of high end customer.
- Intelligently designed to provide the maximum space for wiring of Db's.
- · Shrouded Neutral Bar.
- Door Earthing.
- Mounting of MCB's on Height adjustable DIN Channel.
- Available with Cement Guard Protection.



Osäfe RCCB **Salient Features**



- Range: 25-80Amp, 2 Pole & 4 Pole Version.
- Sensitivity: 30mA, 100mA, 300mA.
- Conforms to IEC / EN: 61008 & IS:12640.
- Dedicated earth leakage protection.
- Voltage Rating 240/415V (AC), 50Hz.
- Protection against Electrocution, Short Circuit & Electrical fire.
- Consistent performance, Compact & Space saving.
- · Auxiliary Switch optional.

Osäfe RCBO

Salient Features

- Range 6Amp-63Amp, 240/415V AC.
- Available in SP+N, 2P(4 Mod.), 4P(8 Mod.).
- Rated Residual Current 30mA, 100mA, 300 mA.
- Rated Short Circuit Capacity 10kA.
- Design Add on type in DP & FP.
- Specification Reference IS12640-2 & IEC 61009-1.





TECHNO

Techno MCB

Salient Features

- Range: 0.5 to 63 Amps 240/415V, AC.
- Available in SP, SPN, DP, TP, TPN & FP.
- Breaking capacity 10kA
- Insulation voltage: 660V, frequency: 50/60Hz.
- Finger Touch proof (IP20).
- Mid Trip Technology.
- Protection against Short Circuit & Over Load.
- Low let through energy & low watt loss.
- Energy limit class 3.
- Trip free mechanism
- Available in B, C & D Curve.
- Accessories :UV, Shunt trip, Auxiliary contact.
- DC MCB available in SP & DP.
- DC MCB voltage: 12V to 220V.

Techno Isolator

Salient Features

- Range: 40, 63,80, 100 & 125 Amps.
- Conforms to IS/IEC 60947-3.
- Available in 2P, 3P & 4P version.
- Finger touch proof (IP-20).



Techno RCCB

Salient Features

- Range: 25-80Amp, 2 Pole & 4 Pole Version.
- Sensitivity: 30mA, 100mA, 300mA.
- Conforms to IEC / EN: 61008 & IS:12640.
- Dedicated earth leakage protection.
- Voltage Rating 240/415V (AC), 50Hz.
- Protection against Electrocution, Short Circuit & Electrical fire.
- Consistent performance, Compact & Space saving
- Auxiliary Switch optional.

Techno MCB Changeover Switch

Salient Features

- Range: 25A, 40A & 63A.
- Conforms to IS/IEC 60947-3.
- Choice of 2 Pole & 4 Pole versions.
- Voltage Rating 240 / 415V (AC), 50Hz.
- Front Operation with three stable positions I-O-II.
- Isolator at middle position.
- DIN Rail Mounting.





Automatic Changeover with Current Limiter (ACCL) Single Phase



Salient Features

- Range: 0.6Amp 10Amp in SPN.
- Specification: IEC 60947-6-1.
- Rated Voltage: 240V AC, 50Hz.
- Microcontroller based DIN rail mountable with neutral Isolation.
- Inbuilt SMPS for low power consumption.
- Operational status indication through LED.
- Automatic generator on/off facility.
- Built-in time delay for fall safe changeover.

Automatic Changeover with Current Limiter (ACCL) Three Phase

Salient Features

- Range: 25A, 40A & 63A.
- Specification IEC 60947-6.
- Voltage 415V AC.
- Electronic & Mechanical interlock for safe changeover.
- Built in time delay for fail safe changeover.
- Overload tripping in DG supply.
- Wide Voltage operation (140 to 280) volts.
- Reliable micro controller based design for sensing & control.



RAKSHAK

Rakshak MCB



Salient Features

- Range: 6 to 63A.
- Available in SP, SPN, DP, TP, TPN & FP.
- ISI marked & conforms to IS:60898-1.
- Protection against Short Circuit & Over Load.
- Finger Touch proof (IP20).
- Available B & C curve.
- Breaking Capacity: 6kA.
- Voltage Rating: 240/415V.
- Low watts loss hence energy saving.
- · Low let through energy.

Rakshak Isolator

Salient Features

- Range: 40 & 63 Amps.
- Conforms to IS 13947-3.
- Available in 2P, 3P & 4P Version.
- Finger touch proof (IP20).





Distribution Systems Single Door

Salient Features

- •`User friendly, Aesthetically designed available in EX series Distribution Systems in 4ways to 16 ways.
- SPN & TPN Versions.
- Fitted with DIN channel, Bus Bar, Neutral Link Bar, Earth Bar, Inter connecting cables with copper thimble.
- Can be mounted on surface / flush.

Distribution System Double Door

Salient Features

- User friendly, Aesthetically designed available in **DX series** Distribution Systems in 4 ways to 16 ways.
- SPN & TPN Versions in Single / Double Door.
- DB's available with cement guard.
- Bus Bar rating upto 200Amp of tinned copper, fully insulated.
- Fitted with DIN channel, Bus Bar, Neutral Link Bar, Earth Bar, Inter connecting cables with copper thimble.
- Complete range of DB's with Double punched knockout to facilitate different size cable glands.
- TPN DB's fitted with detachable gland plates.
- Double Door DB's in Surface / flush mounted design.
- Special DB's for projects also available.





Vertical Distribution Systems

Salient Features

- Aesthetically designed, good looking & superior DB's with latest style.
- Fitted with Bus Bar, Shorting Links, Neutral Bar & Earth Bar.
- Compact design having complete shrouding all over the inter connecting links.
- Provision of ELCB along with TPN/FP Isolator as incomer.
- Suitable to use as SP/DP/TP/TPN outgoing.
- Available with MCCB as incomer.

Tier DB

Salient Features

- Aesthetically and user friendly design available in Single / Double / Three / Four Row version.
- Provide total flexibility as per site needs.
- Configuration as per customer choice of Incomer and Outgoing.
- $\bullet\,$ Top and bottom, removable gland plates with knockouts.
- · Compatible for Flush/ Surface mounting.







Phase Selector Distribution Systems



Salient Features

- · Compact distribution system.
- Convenient mounting and operation.
- Flexibility to use MCB's and RCCB / RCBO.
- Fitted with: DIN channel Bus Bar Neutral Link Bar 3 Nos
- Phase changeover switches duly wired (except for MCB's and RCCR's)

Pre-wired Distribution Board

Salient Features

- DB's Duly pre-wired with FR/FRLS wire .
- Available SPN & TPN Versions.
- Fitted with bus bar terminal block for incoming/outgoing phase.
- Neutral & earthing duly pre-wired.
- Provision of MCB / Isolator / RCCB as incoming Single phase outing.
- Available in 1.6mm & 1.2mm sheet steel thickness.



Consumer Unit - Double Door



Salient Features

- Aesthetically designed Single phase distribution systems.
- Painted with the latest powder coating technology for long lasting surface finish.
- · Available with transparent plastic cover.

Plug & Socket Distribution Systems

Salient Features

- Range : SP-10-20A : TP-20-30A
- Provision for SP / SPN / DP / TP MCB.
- CRCA powder coated DB.
- Elegant Surface / Flush Mounting Design.



Trade Lighting

2.



Decor Ball

Salient Features

- B22 & E27 base.
- Available in Color Red, Green, Yellow, Blue & Frosted.
- Range in 0.5w/1W in Ball.
- Ideal for general lighting.
- Flicker free, Instant Start.
- Life upto 25000 burning hours.

LED GLO 3W, 5W, 7W & 9W

Salient Features

- High efficiency Led's for optimum light output and savings in power.
- Asthetically designed heat sinks with specially designed fins.
- High quality diffuser for glare free distribution.
- Drivers with on board circuit protections.
- Highly efficient metal core PCB.



LED GLO 12W, 15W, 18W & 20W

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Salient Features

- SMD LED's for good quality illumination and longer life.
- Casted Aluminium heat sinks with specially designed fins.
- High quality diffuser for glare free distribution.
- Constant current drivers.
- Highly efficient metal core PCB.

LED GLO 30W, 40W & 50W

Salient Features

- SMD LED's for good quality illumination and longer life.
- Casted Aluminium heat sinks with specially designed fins.
- High quality diffuser for glare free distribution.
- · Constant current drivers.
- Highly efficient metal core PCB.





Trade Lighting



Bright

Salient Features

- Engineered & designed Linear sleek Asthetic PVC housing.
- High efficiency Led's for optimum light output and savings in power.
- High quality PC cover for LED linear lamp ensures soft and glare free lighting.
- Short circuit and surge protection for enhanced reliability and longer service life of driver.
- Wide beam angle of 120° with efficacy over 100 Lm/W.

Phoenix Plus

Salient Features

- Engineered & designed Linear sleek Asthetic PVC housing.
- High efficiency Led's for optimum light output and savings in power.
- High quality PC cover for LED linear lamp ensures soft and glare free lighting.
- Short circuit and surge protection for enhanced reliability and longer service life of driver.
- Wide beam angle of 120° with efficacy over 100 Lm/ W.



Lumino



Salient Features

- Solid sate high brightness SMD LED's for good quality illumination and longer life.
- Excellent heat dissipation through high purity, high thermal conductivity heat sink.
- Special reflector system with high efficiency Translucence diffuser.
- Wide beam angle of 120° with efficacy over 80 Lm/W.

ONYX Plus LED

Salient Features

- Available in 6W, 12W, 15W & 18W.
- High quality aluminum diecast housing.
- Color Temperature 6500K/4000K/2700K.
- Short Circuit & Open Circuit Protection On Driver.
- Highly Efficient Constant Current LED Drivers.
- Diffused Light With Acrylic diffuser.





Trade Lighting



Phoenix Plus 20W

Salient Features

- Engineered & designed Linear sleek Asthetic PVC housing.
- High efficiency Led's for optimum light output and savings in power.
- High quality PC cover for LED linear lamp ensures soft and glare free lighting.
- Short circuit and surge protection for enhanced reliability and longer service life of driver.
- Wide beam angle of 120° with efficacy over 100 Lm/W.



Lumino Plus



Salient Features

- Engineered & designed Linear sleek Asthetic PVC housing .
- High efficiency Led's for optimum light output and savings in power.
- Recess Mounted, Compact Vertical.
- Suitable for low ceiling heights.

Glitz

Salient Features

- Optics through designed lens offering medium beam distribution.
- Well designed housing including Aluminum heat sink.
- Separate replaceable electronic driver.
- Wide operating voltage range from 100 V–285 V.





Trade Lighting



Bulk Head

Salient Features

- Available in 10W.
- Made of pc housing.
- Glare free in white color housing.

Filament Lamp

Salient Features

- Available in 2W & 12W.
- · New LED filament technology.
- 360 (Omni) directional light.
- Direct retrofit solution to replace existing CFL.
- More than 90% energy saving Vs incandescent lamp.
- · Wide operational voltage range.
- Surge protected.





ARC Lamp

Salient Features

- Available in 3W & 50W.
- Glare free light Illumination.
- Wide view angle.
- Classic look.
- Direct retrofit solution to replace existing CFL.
- More than 90% energy saving solution vs incandescent lamp.
- Surge protected.

LED PLL Lamp 9W / 18W

Salient Features

- Available in 9W & 18W.
- Replacement of T-8/T-5 fittings.
- High efficiency LED's for optimum light output and savings in
- High quality PC Diffuser for LED linear lamp ensures soft and glare
- Specially designed PC body for excellent Heat dissipation.
- Short circuit and surge protection for enhanced reliability and longer service life of driver
- Wide beam angle of 120° with efficacy over 80 Lm/W.



Trade Lighting

Regular Retrofit (T4)

Salient Features

- Compact lamp with inbuilt electronic control gear.
- Single ended with B22nd & E27 bases.
- Available in colours 6500, 4000 & 2700 OK
- Range in 11W, 15W, 20W, 23W, 25W, 27W, 30W & 35W.
- Ideal replacement for normal GLS bulb.
- Flicker free instant start
- Six times more life than the normal GLS bulb
- High luminous efficacy and excellent colour rendering.

Spiral Retrofit (T4)

Salient Features

- Compact lamp with inbuilt electronic control gear.
- Excellent light distribution.
- Single ended with B22nd & E27 bases.
- Available in colours 6500, 4000 & 2700OK.
- Range in 15W, 20W, 23W, 27W, 30W&35W. • Ideal replacement for normal GLS Bulb.
- Flicker free instant start.
- Six times more life than the normal GLS Bulb.
- High luminous efficacy and excellent colour rendering.



Higher Wattage Regular/Spiral Retrofit(T5)

Salient Features

- High Power Factor > 0.9.
- Compact lamp with inbuilt electronic control gear.
- Single ended four tube, with B22d, E27 & E40 bases.
- Available in colours 6500, 4000 & 27000K.
- Range in 45W, 65W & 85W (in both 4U & Spiral).
- Flicker free instant start.
- Six times more life than the normal GLS bulb.
- High luminous efficacy and excellent colour rendering.









ELD I dilei Eighting

Salient Features

- Solid sate high brightness SMD LED's for good quality illumination and longer life .
- · Back lit Illumination technology.
- Excellent heat dissipation through high purity, high thermal conductivity heat sink.
- Special reflector system with high efficiency Translucence diffuser.
- On board short circuit and surge protections for reliable electrical system.
- Wide beam angle of 120° with efficacy over 90Lm/W.
- Size 1'x1', 2'x2', 1'x2', 1'x4'.
- Wattage: 18W, 30W & 36W.

Jonex Plus (Surface Type)

Salient Features

- Range: 6W/12W/15W & 18W.
- Flat profile with wide-angle diffuser.
- Housing made up of high heating conductive pure aluminum material.
- Available in all color temperatures $\,6500\,K\,/4000\,K\,/\,2700\,K.$
- Highly efficient constant current drivers with additional protections.
- Instant light with low running temperatures.
- Surface mounting application.



Sleek Plus (Recessed Type)

Salient Features

- Range: 3W/6W/12W/15W & 18W.
- Solid sate high brightness SMD LED's for good quality illumination and longer life.
- Back lit Illumination technology.
- Excellent heat dissipation through high purity, high thermal conductivity heat sink.
- Special reflector system with high efficiency Translucence diffuser.
- On board short circuit and surge protections for reliable electrical system.
- Wide beam angle of 120° with efficacy over 80Lm/W.

Neptune Plus

Salient Features

- Available in 5W / 10W / 20W.
- Replacement of T-8/T-5 fittings.
- High efficiency LED's for optimum light output and savings in power.
- High quality PC Diffuser for LED linear lamp ensures soft and glare free lighting.
- Specially designed aluminum housing for excellent Heat dissipation.
- Short circuit and surge protection for enhanced reliability and longer service life of driver.
- Wide beam angle of 120° with efficacy over 100 Lm/W.

Cadila Plus

Salient Features

- · Available in 20W & 40W.
- Replacement of T-8/T-5 fittings.
- High efficiency LED's for optimum light output and savings in power.
- High quality PC Diffuser for LED linear lamp ensures soft and glare free lighting.
- Specially designed PC body for excellent Heat dissipation.
- Short circuit and surge protection for enhanced reliability and longer service life of driver.
- Wide beam angle of 120° with efficacy over 100 Lm/W.



Indus LED Tube (T8/T5 Retrofit Solution)

Salient Features

- Available in 2ft. & 4ft. Sizes.
- High efficient LED's for optimum light output and savings in power.
- High quality PC diffuser for LED linear lamp ensures soft and glare free lighting.
- Specially designed aluminium housing for excellent Heat dissipation
- Short circuit and surge protection for enhanced reliability and longer service life of driver.
- Wide beam angle of 120° with efficacy over 100 Lm/W.

LED Legacy PC

Salient Features

- Single Tube & Double Tube Option.
- High quality PC cover for LED linear lamp ensures soft and glare free lighting.
- Specially designed housing for excellent Heat dissipation.
- Aesthetically designed box type industrial fixture.
- Industrial Batten suitable for use with single or twin LED Tube.
- CRCA Sheet steal powder coated housing in white to improve resistance against corrosion.







LED Strom PC

Salient Features

- · Available in Single Tube & Double Tube option.
- Made up of corrosion resistant unbreakable poly carbonate
- High quality PC cover for LED linear lamp ensures soft and glare free lighting.
- Weather Proof IP-65.
- Suitable for Industrial Purpose.
- Surface & Suspended mounting.

Industrial Luminaries



LED Highbay

Salient Features

- Range: 70W/90W/100W/120W/150W/180W & 200W.
- Highly efficient heat sink designed to ensure prolong the life
- Efficiently designed constant current driver with wide rang input voltage 140V to 285V.
- Significantly lower running cost as compared to conventional
- Available with toughened glass.
- IP-65.

Well Glass IP-65

Salient Features

- Range: 30W, 40W & 70W.
- Integral radial fins on housing for effective heat dissipation.
- High power, high efficiency LED chip.
- · White powder coated internal reflector.
- Thermally isolated driver and optical compartment.
- · Specially designed for IP65 protection.
- · Loop in Loop out facility.



Outdoor Lighting

LED Street Light

Salient Features

- Available wattages 15W to 30W.
- LED efficacy > 130 lumen / watt.
- Lamp life 50,000 burning hours with L 70 criteria.
- CRI > 70, PF > 0.95, THD < 10%.
- Confirms LM 79 & LM 80.
- Special Features: Reverse EMI protection provided / over voltage protection upto 300V / surge protection upto 6kV.

LED Street Light

Salient Features

- Available wattages 45W to 200W.
- LED efficacy > 130 lumen / watt.
- Lamp life 50,000 burning hours with L 70 criteria.
- CRI > 70, PF > 0.95, THD < 10%.
- Confirms LM 79 & LM 80.
- Special Features : Reverse EMI protection provided / over voltage protection upto 300V / surge protection upto 6kV.



Decorative Street Light

Salient Features

- Available wattages 15W to 150W.
- LED efficacy > 130 lumen / watt.
- Lamp life 50,000 burning hours with L 70 criteria .
- CRI > 70, PF > 0.95, THD < 10%.
- Confirms LM 79 & LM 80.
- Special Feature: Reverse EMI protection provided / over voltage protection upto 300V / surge protection upto 6kV.

LED Flood Light

Salient Features

- Available wattages 15W to 150W.
- LED efficacy > 130 lumen / watt.
- Lamp life 50,000 burning hours with L 70 criteria.
- CRI > 70, PF > 0.95, THD < 10%.
- Confirms LM 79 & LM 80.
- Special Feature: Reverse EMI protection provided / over voltage protection upto 300V / surge protection upto 6kV.



LED Flood Light



Salient Features

- Available wattages 200W to 400W.
- LED efficacy > 130 lumen / watt.
- Lamp life 50,000 burning hours with L 70 criteria.
- CRI > 70, PF > 0.95, THD < 10%.
- Confirms LM 79 & LM 80.
- Special Features: Reverse EMI protection provided / over voltage protection upto 300V / surge protection upto 6kV.





LED Post Top

Salient Features

- Available in 12 to 80W.
- · Pressure Dia cast AI LM-6.
- · Heat resistance toughened glass.
- · Confirm IP-65.
- Applications: Parks, Airport, VIP Roads etc.

LED Post Top Lanterns

Salient Features

- Available wattages 9W to 40W.
- LED Options LED lamp / Discrete Versions.
- Lamp life 50,000 burning hours with L 70 criteria.
- CRI > 75.
- · Confirms LM 79.
- Application: Gardens, Pathways, Societies etc.



LED Bollard

Salient Features

- Available wattages 5W to 12W.
- LED Options LED lamp.
- Lamp life 50,000 burning hours with L 70 criteria.
- CRI > 75.
- Confirms LM 79.
- Application: Gardens, Societies, Petrol Stations, Malls,

CCMS

Salient Features

- User Friendly.
- Single Point Control System Fully Programmable.
- Automatic Report Generation.
- Periodic Data Download at Pre Set Intervals.
- Controlling & Monitoring In Groups as Well as Up To Individual Light Point
- Programmable Automatic Real Time Operation Of Street Lights With Sunset & Sunrise Time.
- · Dimming At Off Peak Hours possible.



LED Ground Burials & Spike Lights



Salient Features

- Available wattages 3W to 15W (12W for Spike).
- LED efficacy upto 130W.
- Lamp life 50,000 burning hours with L70 criteria.
- CRI > 75.
- Confirms IP65 (IP66 available on request).
- Application: Driveways, Facade Lighting, Ambient Lighting



Metal Halide Lamps

MH lamps are available in Double Ended & Single Ended versions. Double ended lamps are available in 70w & 150w. Single Ended lamps are available in Elliptical (ranging from 70w to 400w) & Tubular version (ranging from 35w to 400w). These lamps offers efficacy upto 80-85 lumens / watt.

G12 Single Ended, 35, 70,150W

Salient Features

- Better Colour Rendering • UV Shield
- · Highly Efficient • Longer Life
- · Precise optical control



Double Ended, 70,150W

Salient Features

- UV Shield
- · Longer Life · Precise optical control
- Re-strike
- Better Colour Rendering
- Highly Efficient
- Faster Warm up & Hot

Single Ended-Elliptical, 70,150, 250, 400W

Salient Features

· Better Cold Starting ·

- UV Shield
- Better Colour Rendering
- Superior Lumen Maintenance
- Faster Warmup & Hot Re-strike



Single Ended-Tubular, 70,150, 250, 400W

Salient Features

- UV Shield
- Better Cold Starting
 - Superior Lumen Maintenance

· Better Colour Rendering

• Faster Warmup & Hot

• Re-strike

Accessories

Salient Features

- Electromagnetic Ballast (Copper wound open construction ballast) The VPIT Magnetic Ballasts are available for Compact Fluorescent Lamps (CFL) ranging from 9W to 36W Fluorescent Tubular Lamp (FTL) ranging from 18W to 40W High pressure Sodium vapor lamp/metal Halide Lamp range from 70W to 400W.
- Electronic Ballast are available for CFL ranging from 9W to 36W & FTL ranging from 18W to 36W.







Domestic & Industrial Wire

Salient Features

- Range: 0.5 to 400 Sq. mm in Single Core & Multicore.
- Available in FR / FR-LHS / HR / ZHFR insulation Conforms to IS: 694.
- Multi strand 100% Pure annealed Electrolytic grade copper conductor.
- Bunching of copper in uniform lay & diameter.
- High insulation Resistance.
- Double Insulated with ultra thin layer.

Co-axial Cable /CCS

Salient Features

- Range: RG-59, RG-6, RG-11
- Solid bare annealed electrolytic grade copper
- Aluminum Alloy Braiding / Aluminum Foiling / Taping
- Specially formulated FR PVC
- Low attenuation, High band width Moisture proof, low loss signal Qaulity.



Submersible Cable

Salient Features

- Range: 1.0 to 50.0 Sq. mm three core flat cable.
- Multi stranded bare annealed electrolytic grade copper conductor.
- Specially formulated PVC compound (Type A & ST-1).
- Round submersible cable can be specially asked for.
- · Conforms to IS:694.

Telephone Cable

Salient Features

- Range: 0.40 & 0.50mm dia conductors available up to 50 pairs.
- Solid / Stranded Bare annealed copper Conductor.
- PVC / PE Insulated.
- Individual / Overall Shielded with Aluminium tape (Polyster backed)/ Melinex Tape / Wire braiding / Aluminium foil taping.
- Low cross talk, Low attenuation, High speed transmission.





Control Cable

Salient Features

- Range: 1.5 & 2.5 Sq. mm upto 37 Core, 1100 Volt Grade confirming to IS: 1554-1/1988 & IS 7098-1/1988.
- Solid/ Stranded 100% pure annealed Electrolytic copper conductor.
- Insulation PVC/XLPE/HR
- Armourd/ Unarmourd- GI Round wire/Flat Strip.
- Outer Sheath PVC (ST-1 & ST-2) /FR-LSH/FR/ ZHFR.
- Heavy Duty Performance.
- Best combination safety.
- Efficient & economical.
- Use in Process Control, Communication and Panel control.

Instrumentation Cable

Salient Features

- Range: 0.5 Sq. mm to 2.5 Sq. mm Conforming BS 5308-I & II.
- Shielding: Core/Pair/Triad/Quads.
- ABC/ATC, Solid/Standard 100% pure annealed Electrolytic grade copper conductor.
- Armoured / Unarmoured GI Round wire / Flat Strip.
- · Low attenuation and cross talk.
- For Analog & Digital Signals.
- Low structural return loss.
- · Use in Digital Control, measuring & Communication systems.



Networking Data Cable (CAT - 5e & 6)

Salient Features

- Range: 4-Pair UTP CAT-5e and CAT-6 Cable.
- Solid 100% pure annealed Electrolytic grade copper conductor.
- Low attenuation and cross talk.
- · Low structural return loss.
- Frequency 100MHz for CAT-5e cable and 250MHz for CAT-6 Cable.
- · Gigabite Ethernet.
- Suitable for Voice, Data, Video.
- 100 ohm impedance cable.

Fire Survival Cables

Salient Features

- Range: 0.5 Sq. mm to 2.5 Sq. mm Conforming BS: 7846 600/1000 Volts.
- Shielding: Core/Pair/Triad/Quads with Mica/glass fire
- ABC/ATC, Solid/Standard 100% pure annealed Electrolytic grade copper conductor.
- Armoured / Unarmoured GI Round wire / Flat Strip.
- Operating Temperature -10°C +900 C.
- Fire Tests Bs6387 CWZ, BS 8491, IEC 60331-2.









Salient Features

- Range: 0.5 to 1.5 Sq. mm. for upto 12 core.
- Flexible bare annealed electrolytic grade copper.
- PVC insulated & PVC sheathed.
- Specially formulated PVC.

DC Solar Cable

Salient Features

- Range: Single core 2.5, 4, 6, 10, 16, 35, 50, 70 & 95Sq. mm.
- Flexible tinned annealed electrolytic grade copper conductor.
- Specially formulated cross linked Polyolefin compound insulated and low smoke zero halogen sheathed with UV and Ozone resistant.
- Latest requirement for PV system as per EN-50618.



CCTV Cables



Salient Features

- Range: 3+1 CCTV and 4+1 CCTV Cable.
- Coaxial Cable consists of solid annealed bare copper conductor.
- PE insulated with Nylon foamed dielectric aluminum foil taped, Jelly flooded, braided with aluminum alloy / copper and FR PVC sheathed cable.
- Low loss characteristics reduced attenuation of the video signal.

Smart Modular Switch

6A/10A/20A/32A- DP switch

Salient Features

- ROHS Compliance.
- Captive Screws.
- Dual Protection for spark shield.
- High Grade Flame Retardant Engineering Plastic.
- Silver Nickel contacts for trouble free operations.

AC Box 3M & 4M (Smart Range)

Salient Features

AC Box 3M Protection for short circuit

Protection for short circuit and overload. and overload.

MCB : 20 Amp Motor Starter: 20 Amp Socket : 20 Amp Socket : 20 Amp Top : 20 Amp Top : 20 Amp Plate : 3 Module Plate : 4 Module : 3 Module Box : 3 Module

AC Box 4M



USB Wall Charger (Smart Range)

Salient Features

- Size: 2 module, UB Stabilized.
- Voltage (V) DC 5V.
- Material : Polycarbonate (FR).
- Product is fitted in robust designed assembly plates smug fit on the wall.
- Dust free glossy finish.

Elmo Switch

Salient Features

- Complies with IS 3854:1997
- Tested upto 1 Lakh operations
- Silver Alloy Contact
- Shrouded terminals
- Front loading & removing
- High Grade Flame Retardant Engineering Plastic



Tuff (Solo Switch)





- High Grade Flame Retardant Engineering Plastic.
- Tested upto 2 lakh operations.
- 10 Years Warranty.















Smarters Accessories



Spike Guard

Salient Features

- Universal sockets.
- Length of cable 1.6-1.8 Mtr.
- Surge protection in built.
- Overload protection in built with resetting switch.
- Metal Oxide Varistor (MOV) used as safeguard against surge & spikes.
- Material in use FR ABS plastic.
- Connector swivels 3600.

Extension Cord

Salient Features

- Equipped with universal socket & 2 pin sockets.
- Rated current 6A.
- Rated Voltage 240V AC, 2.4KW.
- PVC insulated wire 4mts. in length.
- Engineering plasti material for high impact & chemical resistance.
- Material in use FR ABS plastic.





Remote Bells

Salient Features

- Plug in type / battery operated wireless bell with volume adjustment.
- 32-48 polyphonic sounds to choose.
- Transmitter with IP44 protection.
- Volume setting in the receiver.
- Operating range up to 80-260mtr. in opne area.
- · Auto learning code.
- Available in different colours in specific models.
- Rated voltage 110V-220V AC (Plug in type).
- Volume 50-80dB.

Batten / Angel Holder

Salient Features

- Rated current 2A.
- Rated Voltage 250V AC.
- Ducts provided on outer surface for heat dissipation.
- SS Spring provided for better flexibility & easy locking for bulb, CFL & LED Bulb.
- Highly conductive brass terminals.
- Material-FR polycarbonate UV stabilized.





Plug Tops 6A/16A

Salient Features • Rated Current 6A/16A.

- Rated Voltage 240V AC.
- 100% shock proof.
- Highly conductive nickel plated contacts.
- Material-FR polycarbonate UV stabilized.

International Travel Adaptor

Salient Features

- Rated Current 6A.
- Rated voltage 110V-240V AC.
- MaterialOengineering plastic for high impact and chemical resistant.
- · Compatible to countries like Australia, China, USA, Europe & UK etc.
- Equipped with universal & USB sockets.





Multi Plugs

Salient Features

- Equipped with universal socket & 2 pin sockets.
- Universal multi socket for different types of plugs used around the world.
- · Rated current-10A.
- Rated Voltage 240V AC.
- Nickel plated brass contacts for better conductivity.
- Available in 4 different transparent colours- Purple, Blue, Green & Orange.
- Material-FR polycarbonate UV stabilized.

Gas Detector

Salient Features

- LPG & CNG gas alarm.
- Semi conductor sensor heads used for accurate flammable gas detection.
- Ideally suitable for Resident, Restaurants, Hotels, etc.
- Test button verify alarm operation any time.
- Loud alarm signal more than 80dB at 10 ft.





Video Door Phone

7" Wifi Enable Video Door Phone with Recording

Model No.: TK-V8+TK-X2

Salient Features

- 2.4 Ghz digital frequency hopping and encryption technology, transmission distance up to 200 meters in free filed.
- 7" Hands free color TFT Screen.
- Two Way Communication
- · Choose from 16 different ring tones.
- Catch the visitor's photo and video automatically, with recording function
- In-bult 8GB, Expandable upto 32 GB.
- · Records Playback with time and date.
- Advanced Night Vision Camera.
- Unlocks the electric lock on recognizing the visitor.
- Expandable up to 4 cameras.

7" Video Door Phone

Model No.: TK-790DV+TK-818C

Salient Features

- 7" Hands free color TFT Screen.
- Touch button.
- Choose from 16 different ring tones.
- Catch the visitor's photo and video automatically, with memory function.
- Records Playback with time and date.
- Two Way Communication.
- · Advanced Night Vision Camera.
- $\bullet\;$ Unlocks the electric lock on recognizing the visitor.
- Expandable up to 3 cameras and 5 monitors.
- · Vandal Proof Metal Cover.





5" Video Door Phone with Recording



Model No.: TK-520C+TK-816C

Salient Features

- 5" Colour TFT Screen Handfree with inside adaptor.
- Sleek Look.
- Enables Two way Communication.
- Unlocks the electric lock on recognizing the visitor.
- Choose from 16 different Ring tones.
- · Advanced Night Vision Camera.
- Expandable upto 3 cameras and 5 monitors.
- Vandal Proof Metal Cover.



Solar Array Junction Box (AJB)

Salient Features

- Array Junction Box is meant for combining all the incoming lines from the solar panel strings/arrays and deriving one common string/array output for the multiple array inputs.
- HPL array junction boxes are insulated according to the requirements of IEC 61439-1 as mandate by MNRE and tested up to an operating voltage of 1000 V DC.
- he enclosure is made of high quality poly-carbonate with IP-65 degree of protection.
- Blocks the reverse flow of current from battery to solar panels.
- Obstructs sudden surges due to lightening strokes during cloudy and rainy conditions and ground the surges immediately.

Solar Main Junction Box (MJB)

Salient Features

- Main Junction Box is used to combine output from several Array Junction Boxes and connect it to DC Distribution Box OR to Power Conditioning Unit / Solar invertor.
- HPL Main Junction Boxes are fully insulated according to the requirements of IEC 61439-1 as mandate by MNRE and tested up to an operating voltage of 1000 V DC.
- Obstructs sudden surges due to lightening strokes during cloudy and rainy conditions and ground the surges immediately.



Solar DC Distribution Box (DCDB)

Salient Features

- The DC distribution unit is used to collect the DC output from Array Junction Box (AJB) and supply it to the inverter.
- In each section of our DC Distribution Box there is MCB/MCCB and a fuse of proper rating depending upon the capacity of the power plant and the battery bank are used.
- All of HPL- DC Distribution boxes is tested/certified as per IEC/IS standard.
- Every terminal is secured and weather proof for outdoor applications also, highly secure wiring, besides being insulated with PG Cable Gland or built-in MC4 terminal connector on demand.

Solar AC Distribution Box (ACDB)

Salient Features

- The ACDB receives AC power from solar inverter and directs it to AC loads.
- A provision can also be made in ACDB to monitor the consumption of power from SPV Power Plant.
- Our ACDBs are designed to deliver high performance and added protection by isolating inverter from mains as and when required.
- All of HPL- AC Distribution boxes are tested/certified as per IEC/IS standard.
- Every terminal is secured and weather proof even for outdoor applications also, highly secure wiring, besides being insulated with PG Cable Gland or built-in MC4 terminal connector on demand.





Solar NET Meter (Import/Export Meter)

Salient Features

• Single Metering unit for Bi-directional Energy Measurement with Separate Energy Registration for import & export.

- Net Energy calculation for Power credits.
- Designed & Developed, as per IS 13779, IS 14697.
- Open Communication Protocol DLMS as per IS 15959.
- AMR compatible unit for local and remote communication.
- Internal Battery Back up to Display Meter Data in power off event.
- History of energy consumption for Billing months.
- TOD wise, Daily & block load survey for profile Data availability.
- Data download through optical Port & RS 232 port .

Solar Cable

Salient Features

- UV resistance: full protection against ultraviolet rays.
- Outdoor durability: resists extreme temperatures (-40°C to 120°C maximum at the core) and ozone resistant.
- Halogen free: Low Smoke Emission & Low Toxicity/Corrosively during fire.
- Lifetime reliability: lasts up to 30 years even under tough external conditions.



Solar LED Bulb

Salient Features

- High efficiency LED's for optimum light output and savings in power.
- Aesthetically designed heat sinks with specially designed fins.
- High quality diffuser for glare free distribution.
- Drivers with on board circuit protections. • Highly efficient metal core PCB.

Solar Batten

Salient Features

- Engineered & designed Linear sleek Asthetic PVC housing.
- High efficiency LED's for optimum light output and savings in
- High quality PC cover for LED linear lamp ensures soft and glare free lighting.
- Short circuit and surge protection for enhanced reliability and longer service life of driver.
- Wide beam angle of 120° with efficacy over >95 Lm/ W.



Solar LED Street Light

Salient Features

- High efficient Luminary with inbuilt charge controller.
- Separate LED's indication of battery charging & discharging.
- Over voltage under voltage and short circuit protection.
- Lamp life 50,000 burning hrs. with L 70 criteria.
- Micro processor managed algorithms autonomously determine sunrise & sunset.

NOTES

