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Solar Powered Road Safety Products & Solar Power Systems

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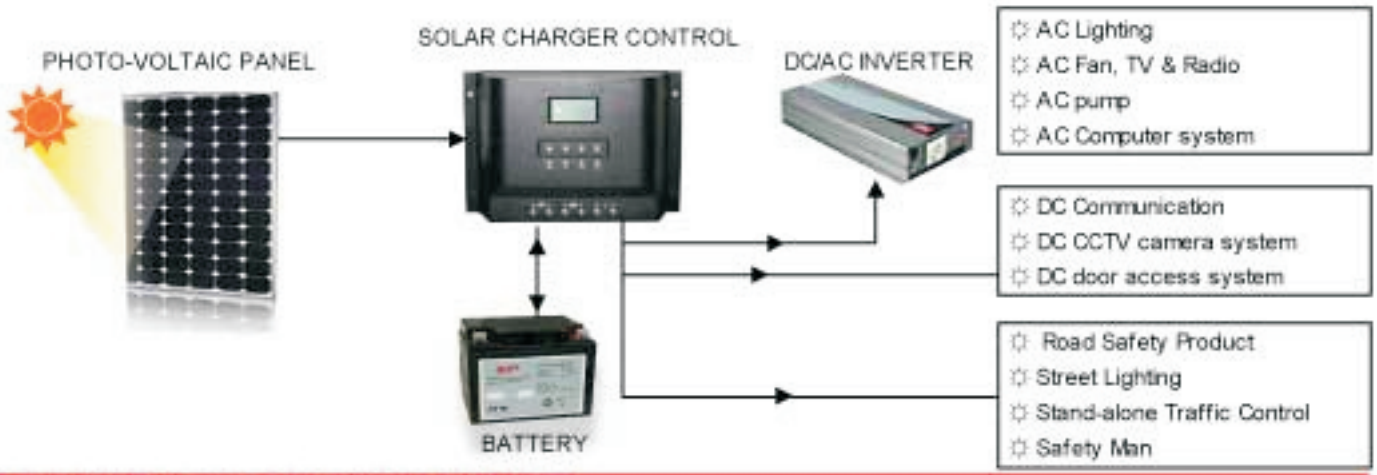
Benefits of Solar Powered System

- Energy from the Sun
- Environmental friendly (Green energy)
- No electricity bill. No need cabling. No pollution
- Free of diesel and fuel
- Low maintenance cost

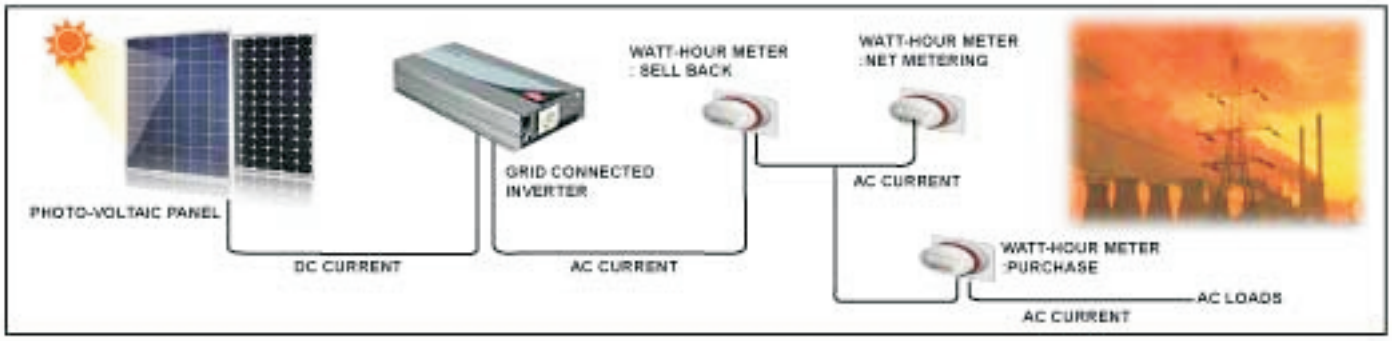
Operation of Stand-alone Solar Power System

The system operation of a Stand-alone Solar Power System is using photovoltaic panel, solar charge controller, inverter and battery. The system generated DC power is stored in the battery and converted to AC power for supplying to AC loads. The Stand-alone Solar Power System operates independent of the electric utility grid and mostly often used in remote areas where the utility grid is not available or where the connection fees of the grid are higher than the cost of an alternative energy system. This system is suitable for powering up home appliances.



Solar Grid Connected Power System

This system is connected to the utility grid and feeds power back into the grid. The system consists of PV panels connected to the grid via inverter. The power produced by the PV System can either feed the loads or be fed back into the grid when the PV system output is greater than the load demand. When the PV System is less than the load demand at nights the energy will be taken from the utility grid.



Solar Powered Road Safety Product

Features :

- Powered by Multi-Crystalline Silicon (MCS) that suitable for severe weather conditions
- Solar Charge Controller with high and low voltage protection
- Operating temperature range 0ºC to 75ºC
- High efficiency solar module designed for lifespan of 15 years
- High effieciency super flux (Piranha) amber /5mm super bright LED Light
- Maintenance-free deep cycle battery for minimum 5-day autonomy back up
- Outdoor type IP65 weather proof cabinet
- Easy installation and minimum maintenance
- Applications : Road corners, road under construction speed limit and hazardous areas

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Solar Powered Chevron

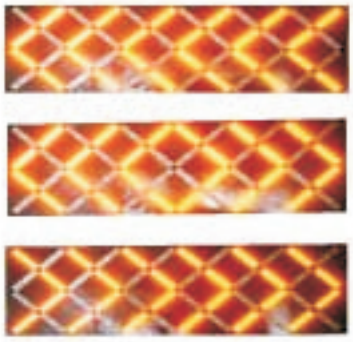
Technical Specifications :

Model	**CHEVRON WD39-3**
Anti-Theft System	Siren will continously be activated on theft attempt
Power Supply	12Vdc
LED	54 pcs Super Flux(Piranha) LED per arrow X 3 arrows
Colour	Amber / Red
Solar panel	12V 10 Watt MCS X 1 panel
Backup Time	5-day autonomy with 12 hours daily operation
Dimensions in mm	L=600 x H=750 x D=50 (Standard size) L=750 x H=900 x D=50 (Special size 1) L =1500 x H=1875 x D=50 (Special size 2)
Material thickness	1.2 mm with E. Galvanised coated with epoxy black color
Weight	12 - 20kg (depending on selection size)
Flashing mode	Flashing/Synchronised
Flashing rate/minute	+/- 40 to 60 Flashing (selectable)
Wave length / typical / angle	590nm/1200mcd/70 degree view angle
Battery (MFSLA)	12V 7Ah (Long Back-up battery capacities upon request)
Reflective Sheeting	High intensity prismatic

Solar Powered Chevron (Detour Light)

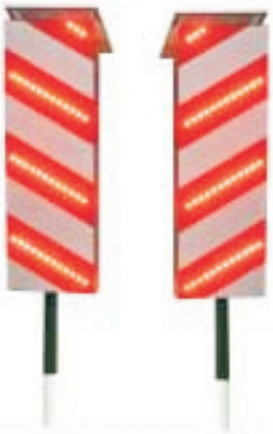
Technical Specifications :

Model	**CHEVRON WD44-24**
Power Supply	12Vdc
LED	Super Flux (Piranha) LED X 96 Strips
Colour	Amber
Solar Panel	12V 80Watt MCS X 2 panels
Backup Time	5-day autonomy with 12 hours daily operation
Dimensions in mm	L=1765 x H=615 x D=60
Material thickness	1.2 mm with E. Galvanised coated with epoxy black color
Weight	30kg
Operation mode	Left/Center/Right
Flashing rate/minute	+/- 40 to 60 Flashing (selectable)
Wave length/typical/angle	590nm/1200mcd/70 degree view angle
Battery (MFSLA)	12V 100Ah (Long Back-up battery capacities upon request)



Solar Powered Obstruction Marker

Model	**MR900**
Power Supply	12V dc
LED	39 pcs Super Flux (Pirahna) LED
Colour	Red
Solar Panel	12V10 Watt MCS X 1 panel
Backup Time	5 day autonomy with 12 hours daily operation
Dimension (H/W/D)mm	L(300) X H(900) X D(80)mm
Material thickness	1.2 mm with E. Galvanised coated with epoxy black color
Weight	12kg
Flashing mode	Flashing/Synchronised
Flashing rate/minute	+/- 40 to 60 Flashing (selectable)
Wave length / typical / angle	590nm/1200mcd/70 degree view angle
Battery (MFSLA)	12V 7Ah
Reflective Sheeting	High intensity prismatic



Solar Powered Flashing Amber Warning Light

Model	**WL300**
LED	230 pcs of 5 mm 30 deg. view angle super bright LED
Colour	Amber/Red/Blue
Solar Panel	12V 8 Watt MCS
Backup Time	5-day autonomy with 24 hours daily operation
Material	Polycarbonate
Battery (MFSLA)	12V 7Ah
Candela	500cd
Flashing Rate/minute	+/- 40 to 60 Flashing (selectable)/Synchronised
Dimension	300mm diameter

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Solar Powered Speed Limit

Technical Specifications :

Model	**SL1000**
Power Supply	12Vdc
L.E.D	5mm 30 deg. view angle super bright LED (500cd)
Colour	Red /Amber
Solar panel	12V 80Watt MCS X 1 panel
Backup Time	5-day autonomy with 12 hours daily operation
Flashing rate/minute	+/- 40 to 60 Flashing (selectable)
Dimension in mm	L=1150 x H=1150 x D=55
Material thickness	1.2mm with E. Galvanised coated with epoxy black color
Solar Charge Controller	SUNCON1210 (option)
Battery (MFSLA)	12V 100Ah

Solar Powered LED Flood Lighting

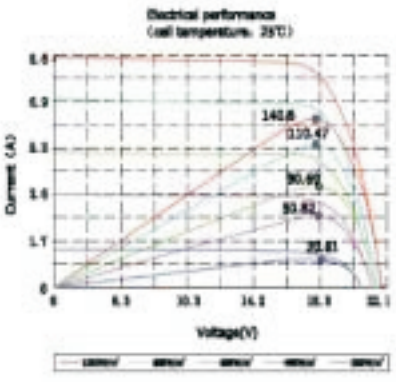
Technicals specifications :

Model	**SUN30**
L.E.D Power	30W High power LED
L.E.D colour	Warm white, white or cool white
System Voltage	12V/24V dc
Size of L.E.D module	L275 x W165 X H235 mm
Emitting angle	60/120 degree
Luminous flux	More than 2700 lm
Solar panel	12V80 Watt MCS
Backup time	5-day autonomy with 12 hours daily operation
Solar charger controller	SUNCON1210
Battery (MFSLA)	12V 100AH

Poly Crystalline Solar Module

Technicals specifications :

Model	**SP110**	**SP120**	**SP140**
Peak Power-Pmax (W)	110	120	140
Open Circuit Voltage-Voc (V)	20.4	20.8	21.6
Maximum Power Voltage Vmp (V)	16.6	17.2	17.9
Short Circuit Current-Isc(A)	7.41	7.7	8.4
Maximum Power Current-Imp (A)	6.61	6.9	7.82
Module Efficiency nm(%)	10.9	11.9	13.9
Maximum system voltage	1000V dc	1000V dc	1000V dc
Power Tolerance	0 TO + 3%	0 TO + 3%	0 TO + 3%
Nominal Operating Cell Temperature (NOCT)	45 °C	45 °C	45 °C
Standard Testing Condition (STC) Irradiance	1000W/m2		
Frame	Anodized Aluminium Alloy		
Junction box	IP65		



SuperFlux LED (Piranha LED)

This revolutionary package design allows the lighting designer to reduce the number of LEDs required and provide a more uniform and unique illuminated appearance than with other LED solutions. This is possible through the efficient optical package design and high current capabilities.

The low profile package can be easily coupled with reflectors or lenses to efficiently distribute light and provide the desired lit appearance. This product family employs the world's brightest red-orange and amber LED materials, enabling designers to match the colour of popular lighting applications such as automotive tail, stop and turn signal lamps and electronic signs.

Technical Specifications :

Model	**Strips LED**
Dominant wavelength	590 nm
Min Candela	3.0
Min Flux (lumens)	1.0lm
Viewing Angle	70 deg