

## BUILD PROFILE

Device	Quantity
30W Solar Panel)	x1
Bluetooth Enabled Smart Solar Controller	x1
12V 36Ah Lithium Iron Phosphate Battery	x1
2G/4G Alarm Hub	x1
12V PSU Board	x1
PIR with Built-In Camera	x1
External Siren	x1

## 30w SOLAR PANEL

Specifications	
Nominal Voltage (±3% Tolerance)	30W
Cell Type	Monocrystalline
Number of Cells in Series	36
Maximum System Voltage	1000V
Temperature Co-Efficient of MPP (%)	-0.45/°C
Temperature Co-Efficient of Voc (%)	-0.35/°C
Temperature Co-Efficient of Isc (%)	+0.04/°C
Temperature Range	-40°C - 85°C
Surface Maximum Load Capacity	200 kg/m <sup>2</sup>
Allowable Hail Load	23 m/s, 7.53kg
Junction Box Type	PV-LH0805
Cable Type	No Cable
Output Tolerance	±3%
Frame	Aluminium
Dimensions	560mm x 350mm x 25mm
Weight	2.2kg



Call our Expert Sales Team for more information.

# BLUETOOTH ENABLED SMART SOLAR CONTROLLER

Specifications	
Battery Voltage (Auto-Select)	12/24V
Rated Charge Current	10A
Nominal PV Power, 12V	145W
Nominal PV Power, 24V	290W
Maximum PV Short Circuit Current	13A
Automatic Load Disconnect	Yes
Maximum PV Open Circuit Voltage	75V
Peak Efficiency	98%
Self Consumption - Load On	12V: 19mA / 24V: 16mA
Self Consumption - Load Off	12V: 10mA / 24V: 8mA
Charge Voltage: 'Absorption'	14.4V / 28.8V (Adjustable)
Charge Voltage: 'Float'	13.8V / 27.6V (Adjustable)
Charge Algorithm	Multi-Stage Adaptive
Temperature Compensation	-16 mV / °C resp. -32mV / °C
Maximum Continuous Load Current	15A
Low Voltage Load Disconnect	11.1V / 22.2V / 44.4V or 11.8V / 23.6V / 47.2V or Battery Life Algorithm
Low Voltage Load Reconnect	13.1V / 26.2V / 52.4V or 14V / 28V / 56V or Battery Life Algorithm
Protection	Output Short Circuit / Overheat
Operating Temperature	-30°C~60°C (Full Rated Output Up To 40°C)
Operating Humidity	95%; Non-Condensing
Communication	Bluetooth
Colour	Blue (RAL 5012)
Power Terminals	6mm <sup>2</sup> / AWG10
Protection Category	IP43 (Electrical Components) / IP22 (Connection Area)
Weight	0.5kg
Dimensions (H x W x D)	100mm x 113mm x 40mm
Safety Certifications	EN/IEC 62109-1, UL 1741, CSA C22.2
Maximum PV Open Circuit Voltage	75V
Data Stored	Battery voltage, current and temperature, as well as load output current, PV voltage and PV current.
Number of Days Trend Data is Stored	46

# 12V 36Ah Lithium Iron Phosphate Battery

Specifications	
Nominal Voltage	12.6V
Rated Capacity (20 Hour Rate)	36Ah
Terminal	M6
Capacity Retention	>80% at 28 Days
Cycle Life	>80% at 1500 Cycles
1.5 Hour Discharge to 10.5V	9.0A
Internal Resistance	<80 mΩ
Charge Voltage	14.4±0.1V
Charge Current	<40A
Continuous Current	50A
Maximum Pulse Current	150A (<5ms)
Discharge Cut-Off Voltage	8V
Charge Temperature	0°C~45°C (32°F~113°F)
Discharge Temperature	-20°C~60°C (-4°F~140°F)
Storage Temperature	0°C~40°C (32°F~104°F)
Dimensions (H x W x D)	172mm x 133mm x 194mm
Weight	4.3kg

# 2G ALARM HUB

Specifications	
Classification	Security System Control Panel
Colour	Black
Maximum No. Connected Devices	Up to 100
Maximum No. Connected Radio Signal Range Extenders	Up to 5
Video Surveillance	Up to 25 Cameras or DVRs
Users	Up to 50
Rooms	Up to 50
Scenarios	Up to 32
Security Groups	Up to 9
Communication Channels	Ethernet, 2 SIM Cards, 2G (GSM900/DCS1800 (B3/B8))
Alarm Delivery Time	0.15 sec
Types of Notification	Push Notifications / Phone Calls / SMS
Sending Photo in Case of Alarm	Photo Delivery Time: Up to 9 Seconds; Photo Resolution: Up to 640x480px Photos in a Series: 1 to 5
Switching Between SIM Cards	Up to 4 minutes
Support of Central Monitoring Station Communication Protocols	Sur-Gard (Contact ID), SIA (DC-09), Proprietary Protocols.
Support of Monitoring Software	PRO Desktop
Operating System	OS Malevich
Power Supply	110-240 V, 50/60Hz; Consumption from the 110-240 V AC grid is up to 10 W
Backup Battery	Li-Ion 2Ah; Up to 16h Battery Life with Ethernet Disabled
Jeweller Radio Protocol	<p>Communication range — up to 2000 meters in a line of sight Two-way communication between devices</p> <p>Radio frequency bands: 866.0 – 866.5 MHz 868.0 – 868.6 MHz 868.7 – 869.2 MHz 905.0 – 926.5 MHz 915.85 – 926.5 MHz 921.0 – 922.0 MHz (depends on the region of sale)</p> <p>Auto-regulated radio signal power: <math>\leq 20</math> mW Blocking encryption based on the AES algorithm Detector ping interval: 12–300 seconds Frequency hopping</p>

## 2G ALARM HUB (CONT.)

Specifications	
Wings Radio Protocol	Transmission of a series of photos Transmission of photos by request Checking photo delivery  Radio frequency bands: 866.0 – 866.5 MHz 868.0 – 868.6 MHz 868.7 – 869.2 MHz 905.0 – 926.5 MHz 915.85 – 926.5 MHz 921.0 – 922.0 MHz (depends on the region of sale)  Auto-regulated radio signal power: $\leq 20$ mW Blocking encryption based on the AES algorithm
IP Rating	IP50
Operating Temperature	-10°C~40°C
Operating Humidity	Up to 75%
Anti-Sabotage	Forgery prevention; Notifications about jamming; Tamper to detect back lid opening and unmounting
Remote Configuration	+
Dimensions	163mm x 163mm x 36mm
Weight	0.362kg

## 12V PSU BOARD

Specifications	
Compatibility	2G Alarm Hub (See Previous)
Input Voltage	DC 8-20V
Output Voltage	4.65V $\pm 3\%$
Switch-On Voltage	8V $\pm 2.5\%$
Switch-Off Voltage	6.9 - 7.5V (Depending on Load)
Input Current	<1A
Output Current	1.5A
Connections	Socket: 6.5mm x 2mm; Plug: 5.5mm x 2.1mm (Power Jack)
Dimensions	138mm x 64mm x 13mm
Net Weight	0.03kg

# PIR WITH BUILT-IN-CAMERA

Specifications	
Classification	Electro-Optical Radio Channel Security Detector
Type of Detector	Wireless
Installation	Outdoor/Indoor
Recommended Installation Height	0.8m to 1.3m
Sensing Element	2x PIR Sensor
Motion Detection Distance	Adjustable, from 3m to 15m
Pet Immunity	Animals Up To 80cm Tall
Sensitivity	Adjustable, 3 Levels
Motion Detector's Viewing Angle	Horizontal — 90° Vertical — 80°
Camera Angle	Horizontal — 105° Vertical — 50°
TV Distortion (EBU standard)	Barrel -17%
Photo in Case of Alarm	Photo resolution:  320 × 176 pixels (by default) 640 × 352 pixels  Shooting series up to 5 photos
Infrared Light for Shooting in the Dark	Yes
Power Supply	4x CR123A Batteries
Supply Voltage	6V
Jeweller Radio Protocol	Communication range with a hub — up to 1,700 m in an open space Two-way communication between hub and device  Radio frequency bands: 866.0 – 866.5 MHz 868.0 – 868.6 MHz 868.7 – 869.2 MHz 905.0 – 926.5 MHz 915.85 – 926.5 MHz 921.0 – 922.0 MHz (depends on the region of sale)  Self-adjusting RF output power — up to 20 mW Block encryption with a dynamic key Detector polling period — 12–300 s Frequency hopping
Alarm Delivery Time	0.15s
Temperature Sensor	Yes

## PIR with Built-In Camera (Cont.)

Specifications	
Wings Radio Protocol	Transmission of a series of photos Photo delivery time with a default settings: up to 9 seconds
Operating Temperature	-25°C~60°C
Operating Humidity	Up to 95%
IP Rating	IP55
Anti-Sabotage	Anti-masking; Protection against forgery; Jamming detection; Tamper-resistant
Dimensions	206mm x 108mm x 93mm
Weight	0.47kg

## EXTERNAL SIREN

Specifications	
Classification	Warning Device with LED Indicators (Outdoor Siren)
Type of Detector	Wireless
Installation	Outdoor/Indoor
Type of Notification	Sound/Light
Sound Volume Level	Adjustable, 85–113 dB at a Distance of 1m
Alarm Duration	Adjustable; 3s to 3min
Indication of Armed/Disarmed Status	Yes
Power Supply	Battery: Four CR123A batteries, 3 V Mains supply: DC 12 V±20%
Battery Life	5 Years
Jeweller Radio Protocol	Communication range with central unit — up to 1,500 m in an open space Two-way communication between devices  Radio frequency bands: 866.0 – 866.5 MHz 868.0 – 868.6 MHz 868.7 – 869.2 MHz 905.0 – 926.5 MHz 915.85 – 926.5 MHz 921.0 – 922.0 MHz (depends on the region of sale)  Self-adjusting RF output power — up to 20 mW Block encryption based on AES algorithm Detector polling period — 12–300 s
Operating Temperature	-25°C~50°C
Operating Humidity	Up to 95%
IP Rating	IP54
Anti-Sabotage	Forgery prevention; Jamming detection; Tamper-resistant
Dimensions	200mm x 200mm x 51mm
Weight	0.528kg