Single-Axis SOLAR TRACKER for 3 panels ST40M2V3P



Code: 0115

www.solar-motors.com

- With time-derived astronomical positioning for the automatic sun-tracking
- Single-Axis solar tracker with embedded positioner
- Time controlled astronomical algorithm for sun tracking
- Simple installation and synchronization of sun time
- Usable for PV, CPV and lighter thermal panels
- 7 hours of automatic tracking at perpendicular angle
- User friendly web interface for monitoring, setting and upgrading
- USB comunication port, optionally RS485
- For surface area up to 4,9 m² and max 60 kg
- Made in Europe

GREEN ENERGY

SunTracer is registered trademark® of company Sat Control.® All rights reserved. Copyright.





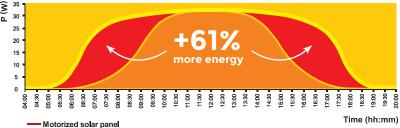


Single-Axis SOLAR TRACKER for 3 panels ST40M2V3P

Monte of Urring axis Single-Axis
Hour Angle Limit 100°, software and hardware limit 50°E to 50°W Elevation angle 15-90°, adjustable start Type of hour-angle motor Linear Motor SM4SSIOM2 with stroke of 510 mm Hour-angle shaft diameter and length 948 mm, L=1400 mm (steel) Backstructure size 2 pcs of 1000 (H) mm & 4 pcs of 1000 (V) mm Type of backstructure clamp Toothed scissors girpers - 12 pcs Tube diameter for mounting 960-68 mm (not included with kit) Max. dimensions of a solar panel 3 pieces of 0,99 m x 1,65 m in total 4,9 m² Max. weight of a solar panel 3 pcs per 20 kg Estimated service life 800-1000h of motor operation (DC motor replace on 8 years if each day one cycle), backup battery replace on 3-5-years if battery in, all other 25 years Positioning System Data Tracking accuracy < 0,5° (optionally < 0,1° - for additional payment.) Operating Protocol Tadaps (Time derived Astronomical Positioning System) Type of Positioning System Servo driver positioner with Tadaps are logic function calc. Type of application program for supervision and setting Setting and changing data via PC Monitoring possibility via PC Yes Turned on the position sent from PC Turning time interval 1-15 min. Communication Data Time derived Astronomical PC, also all other setting can be commanded with string sent from PC, also all other setting can be commanded with string sent from PC Turning time interval 1-15 min. Communication Data Firmware - Software USB interface Networking solution for control from centre Firmware - Software Upgrading possibility via PC Yes, firmware via PC with help of Helios Analytics Electrical Data Motor Power Supply 24 VDC +5% / -15% (2.5A current capacity) SMPS must have 150% inrush current Backup Datapy CO R 2512 coin
Elevation angle 15-90°, adjustable start Type of hour-angle motor Linear Motor SM45510M2 with stroke of 510 mm Hour-angle shaft diameter and length 948 mm, 1=1400 mm (steel) Backstructure size 2 pcs of 1000 (H) mm & 4 pcs of 1000 (V) mm Type of backstructure clamp Toothed scissors gripers - 12 pcs Tube diameter for mounting 960-68 mm (not included with kit) Max. dimensions of a solar panel 3 pieces of 0,99 m x 1,65 m in total 4,9 m² Max. weight of a solar panel 3 pcs per 20 kg Estimated service life 800-1000h of motor operation (DC motor replace on 8 years if each day one cycle), backup battery replace on 3-5 years if battery in, all other 25 years Positioning System Data Tracking accuracy < 0.5° (optionally < 0.1° - for additional payment.) Operating Protocol TdAPS (Time derived Astronomical Positioning System) Type of Positioner Din Rail positioner with TdAPS are logic function calc. Type of spilication program for supervision and setting Setting and changing data via PC Yes Monitoring possibility via PC Yes Monitoring possibility via PC Yes, it turn on position sent from PC, also all other setting can be commanded with string sent from PC Turning time interval 1-15 min. Communication Data Type of communication interface USB interface Networking solution for control from centre Firmware - Software Upgrading possibility via PC Yes, firmware via PC with help of Helios Analytics Electrical Data Motor Power Supply 24 VDC +5% / -15% (2.5A current capacity) SMPS must have 150% inrush current Backup battery CR 2512 coin Standby consumption (when is not moving) 20 mA ± 25% @ 24VDC
Type of hour-angle motor Linear Motor SM4S510M2 with stroke of 510 mm Hour-angle shaft diameter and length ### A mm, L=1400 mm (steel) ### Backstructure size 2 pcs of 1000 (H) mm & 4 pcs of 1000 (V) mm Type of backstructure clamp Toothed scissors gripers - 12 pcs Tube diameter for mounting ### 60-68 mm (not included with kit) ### Max. weight of a solar panel ### 3 pcs per 20 kg Estimated service life ### 800-1000h of motor operation (DC motor replace on 8 years if each day one cycle), backup battery replace on 3-5 years if battery in, all other 25 years ### Positioning System Data Tracking accuracy Positioning System Data Tracking accuracy Positioning System Data Tracking accuracy Co.5" (optionally < 0.1" - for additional payment.) Operating Protocol
Hour-angle shaft diameter and length Backstructure size 2 pcs of 1000 (H) mm & 4 pcs of 1000 (V) mm Type of backstructure clamp Toothed scissors gripers - 12 pcs Tube diameter for mounting #60-68 mm (not included with kit) Max. dimensions of a solar panel 3 pieces of 0.99 m x 1,65 m in total 4,9 m² Max. weight of a solar panel 3 pcs per 20 kg Estimated service life 800-1000h of motor operation (DC motor replace on 8 years if each day one cycle), backup battery replace on 3-5 years if battery in, all other 25 years Positioning System Data Tracking accuracy < 0.5° (optionally < 0.1° - for additional payment.) Operating Protocol TdAPS (Time derived Astronomical Positioning System) Type of Positioning System Servo driver positioner with TdAPS are logic function calc. Type of spositioner Type of application program for supervision and setting Setting and changing data via PC Yes Monitoring possibility via PC Yes Turned on the position sent from PC Turning time interval Turning time interval Type of communication interface Networking solution for control from centre Firmware - Software Upgrading possibility via PC Yes, firmware via PC with help of Helios Analytics Electrical Data Motor Power Supply 24 VDC +5% / -15% (2.5A current capacity) SMPS must have 150% inrush current Backup battery CR 2512 coin Standby consumption (when is not moving) 20 mA ± 25% @ 24VDC
Backstructure size 2 pcs of 1000 (H) mm & 4 pcs of 1000 (V) mm Type of backstructure clamp Toothed scissors gripers - 12 pcs Tube diameter for mounting Ø60-68 mm (not included with kit) Max. dimensions of a solar panel 3 pieces of 0,99 m x 1,65 m in total 4,9 m² Max. weight of a solar panel 3 pcs per 20 kg Estimated service life 800-1000h of motor operation (DC motor replace on 8 years if each day one cycle), backup battery replace on 3-5 years if battery in, all other 25 years Positioning System Data Tracking accuracy < 0.5° (optionally < 0.1° - for additional payment.) Operating Protocol TdAPS (Time derived Astronomical Positioning System) Type of Positioning System Servo driver positioner with TdAPS arc logic function calc. Type of positioner Din Rail positioner MICRO and externor cables Type of application program for supervision and setting Solar tracking system monitor via web site Setting and changing data via PC Yes Turned on the position sent from PC Yes, it turn on position sent from PC, also all other setting can be commanded with string sent from PC Turning time interval 1-15 min. Communication Data Type of communication interface USB interface Networking solution for control from centre R545 Firmware - Software Upgrading possibility via PC Yes, firmware via PC with help of Helios Analytics Electrical Data Motor Power Supply 24 VDC +5% / -15% (2.5A current capacity) SMPS must have 150% inrush current Backup Data C you must include a consumption (when is not moving) 20 mA ± 25% @ 24VDC
Type of backstructure clamp Toothed scissors gripers - 12 pcs Tube diameter for mounting ### #60-68 mm (not included with kit) Max. dimensions of a solar panel 3 pieces of 0,99 m x 1,65 m in total 4,9 m² Max. weight of a solar panel 3 pcs per 20 kg Estimated service life #### #800-1000h of motor operation (DC motor replace on 8 years if each day one cycle), backup battery replace on 3-5 years if battery in, all other 25 years Positioning System Data Tracking accuracy < 0.5° (optionally < 0.1° - for additional payment) Operating Protocol TdAPS (Time derived Astronomical Positioning System) Type of Positioning System Servo driver positioner with TdAPS arc logic function calc. Type of positioner Type of application program for supervision and setting Solar tracking system monitor via web site Setting and changing data via PC Yes Monitoring possibility via PC Yes Turned on the position sent from PC Turning time interval Type of communication interface USB interface USB interface Wetworking solution for control from centre Firmware - Software Upgrading possibility via PC Yes, firmware via PC with help of Helios Analytics Electrical Data Motor Power Supply 24 VDC +5% / -15% (2.5A current capacity) SMPS must have 150% inrush current Scan CR 2512 coin Standby consumption (when is not moving) 20 mA ± 25% @ 24VDC
Tube diameter for mounting #60-68 mm (not included with kit) Max. dimensions of a solar panel 3 pieces of 0,99 m x 1,65 m in total 4,9 m² Max. weight of a solar panel 3 pec per 20 kg Estimated service life 800-1000h of motor operation (DC motor replace on 8 years if each day one cycle), backup battery replace on 3-5 years if battery in, all other 25 years Positioning System Data Tracking accuracy < 0.5' (optionally < 0.1' - for additional payment.) Operating Protocol TdAPS (Time derived Astronomical Positioning System) Type of Positioning System Servo driver positioner with TdAPS arc logic function calc. Type of positioner Din Rail positioner MICRO and externor cables Type of spositioner GMT clock with EOT and calendar Type of application program for supervision and setting Solar tracking system monitor via web site Setting and changing data via PC Yes Monitoring possibility via PC Yes Turned on the position sent from PC Yes, it turn on position sent from PC, also all other setting can be commanded with string sent from PC Turning time interval 1-15 min. Communication Data Type of communication interface USB interface Networking solution for control from centre R\$485 Firmware - Software Upgrading possibility via PC Yes, firmware via PC with help of Helios Analytics Electrical Data Motor Power Supply 24 VDC +5% / -15% (2.5A current capacity) SMPS must have 150% inrush current Backup battery CR 2512 coin
Max. dimensions of a solar panel 3 pieces of 0,99 m x 1,65 m in total 4,9 m² Max. weight of a solar panel 3 pcs per 20 kg Estimated service life 800-1000h of motor operation (DC motor replace on 8 years if each day one cycle), backup battery replace on 3-5 years if battery in, all other 25 years Positioning System Data Tracking accuracy < 0.5° (optionally < 0.1° - for additional payment) Operating Protocol TdAPS (Time derived Astronomical Positioning System) Type of Positioning System Servo driver positioner with TdAPS arc logic function calc. Type of positioner Din Rail positioner MICRO and externor cables Type of application program for supervision and setting Solar tracking system monitor via web site Setting and changing data via PC Yes Monitoring possibility via PC Yes Turned on the position sent from PC Yes, it turn on position sent from PC Turning time interval 1-15 min. Communication Data Type of communication interface USB interface Networking solution for control from centre RS485 Firmware - Software Upgrading possibility via PC Yes, firmware via PC with help of Helios Analytics Electrical Data Motor Power Supply 24 VDC +5% / -15% (2.5A current capacity) SMPS must have 150% inrush current Backup Battery CR 2512 coin
Max. weight of a solar panel 3 pcs per 20 kg Estimated service life 800-1000h of motor operation (DC motor replace on 8 years if each day one cycle), backup battery replace on 3-5 years if battery in, all other 25 years Positioning System Data Tracking accuracy < 0.5" (optionally < 0.1" - for additional payment) Operating Protocol TdAPS (Time derived Astronomical Positioning System) Type of Positioning System Servo driver positioner with TdAPS are logic function calc. Type of positioner Din Rail positioner MICRO and externor cables Type of application program for supervision and setting Setting and changing data via PC Yes Monitoring possibility via PC Yes Monitoring possibility via PC Yes, it turn on position sent from PC, also all other setting can be commanded with string sent from PC Turning time interval 1-15 min. Communication Data Type of communication interface USB interface Networking solution for control from centre R5485 Firmware - Software Upgrading possibility via PC Yes, firmware via PC with help of Helios Analytics Electrical Data Motor Power Supply 24 VDC +5% / -15% (2.5A current capacity) SMPS must have 150% inrush current Standby consumption (when is not moving) 20 mA ± 25% @ 24VDC
Estimated service life 800-1000h of motor operation (DC motor replace on 8 years if each day one cycle), backup battery replace on 3-5 years if battery in, all other 25 years Positioning System Data Tracking accuracy < 0.5' (optionally < 0.1' - for additional payment) Operating Protocol TdAPS (Time derived Astronomical Positioning System) Type of Positioning System Servo driver positioner with TdAPS arc logic function calc. Type of positioner Type of application program for supervision and setting Solar tracking system monitor via web site Setting and changing data via PC Yes Monitoring possibility via PC Turned on the position sent from PC Turning time interval Type of communication interface Networking solution for control from centre RS485 Firmware - Software Upgrading possibility via PC Yes, firmware via PC with help of Helios Analytics Electrical Data Motor Power Supply 24 VDC +5% / -15% (2.5A current capacity) SMPS must have 150% inrush current Standby consumption (when is not moving) 20 mA ± 25% @ 24VDC Standby consumption (when is not moving)
Tracking accuracy < 0.5° (optionally < 0.1° - for additional payment) Operating Protocol TdAPS (Time derived Astronomical Positioning System) Type of Positioning System Servo driver positioner with TdAPS arc logic function calc. Type of positioner Type of positioner Din Rail positioner MICRO and externor cables Type of application program for supervision and setting Solar tracking system monitor via web site Setting and changing data via PC Yes Monitoring possibility via PC Turned on the position sent from PC Yes, it turn on position sent from PC, also all other setting can be commanded with string sent from PC Turning time interval Communication Data Type of communication interface Networking solution for control from centre Firmware - Software Upgrading possibility via PC Yes, firmware via PC with help of Helios Analytics Electrical Data Motor Power Supply 24 VDC +5% / -15% (2.5A current capacity) SMPS must have 150% inrush current Backup battery CR 2512 coin Standby consumption (when is not moving) 20 mA ≠ 25% @ 24VDC
Operating Protocol TdAPS (Time derived Astronomical Positioning System) Type of Positioning System Servo driver positioner with TdAPS arc logic function calc. Type of positioner Din Rail positioner MICRO and externor cables Type of application program for supervision and setting Setting and changing data via PC Yes Monitoring possibility via PC Yes Turned on the position sent from PC Turning time interval Type of communication interface Networking solution for control from centre Firmware - Software Upgrading possibility via PC Yes, firmware via PC with help of Helios Analytics Electrical Data Motor Power Supply 24 VDC +5% / -15% (2.5A current capacity) SMPS must have 150% inrush current Backup battery CR 2512 coin Standby consumption (when is not moving) 20 mA ± 25% @ 24VDC Standby consumption (when is not moving)
TdAPS (Time derived Astronomical Positioning System) Type of Positioning System Servo driver positioner with TdAPS arc logic function calc. Type of positioner Din Rail positioner MICRO and externor cables Type of timer GMT clock with EOT and calendar Type of application program for supervision and setting Setting and changing data via PC Wes Monitoring possibility via PC Turned on the position sent from PC Turning time interval Turning time interval Type of communication Data Type of communication interface Networking solution for control from centre Firmware - Software Ugrading possibility via PC Yes, firmware via PC with help of Helios Analytics Electrical Data Motor Power Supply 24 VDC +5% / -15% (2.5A current capacity) SMPS must have 150% inrush current Backup battery CR 2512 coin Standby consumption (when is not moving) 20 mA ± 25% @ 24VDC Served Astronomical Positioning System Din Rail position with TdAPS arc logic function calc. Din Rail position with TdAPS arc logic function calc. Din Rail position with EOR and externor cables Solr tracking system monitor via web site Solar tracking system monitor via web si
Type of Positioning System Servo driver positioner with TdAPS arc logic function calc. Type of positioner Din Rail positioner MICRO and externor cables Type of timer GMT clock with EOT and calendar Type of application program for supervision and setting Solar tracking system monitor via web site Setting and changing data via PC Monitoring possibility via PC Turned on the position sent from PC Turning time interval Communication Data Type of communication interface USB interface Networking solution for control from centre Firmware - Software Upgrading possibility via PC Yes, firmware via PC with help of Helios Analytics Electrical Data Motor Power Supply 24 VDC +5% / -15% (2.5A current capacity) SMPS must have 150% inrush current Backup battery CR 2512 coin Standby consumption (when is not moving) 20 mA ± 25% @ 24VDC
Type of positioner Din Rail positioner MICRO and externor cables Type of timer GMT clock with EOT and calendar Type of application program for supervision and setting Solar tracking system monitor via web site Setting and changing data via PC Yes Monitoring possibility via PC Yes, it turn on position sent from PC, also all other setting can be commanded with string sent from PC Turning time interval 1-15 min. Communication Data Type of communication interface USB interface Networking solution for control from centre RS485 Firmware - Software Upgrading possibility via PC Yes, firmware via PC with help of Helios Analytics Electrical Data Motor Power Supply 24 VDC +5% / -15% (2.5A current capacity) SMPS must have 150% inrush current Backup battery CR 2512 coin Standby consumption (when is not moving) 20 mA ± 25% @ 24VDC
Type of application program for supervision and setting Solar tracking system monitor via web site Setting and changing data via PC Monitoring possibility via PC Turned on the position sent from PC Turning time interval Type of communication Data Type of communication interface Networking solution for control from centre Firmware - Software Upgrading possibility via PC Yes, ir turn on position sent from PC, also all other setting can be commanded with string sent from PC 1-15 min. Communication Data Type of communication interface Networking solution for control from centre RS485 Firmware - Software Upgrading possibility via PC Yes, firmware via PC with help of Helios Analytics Electrical Data Motor Power Supply 24 VDC +5% / -15% (2.5A current capacity) SMPS must have 150% inrush current Backup battery CR 2512 coin Standby consumption (when is not moving) 20 mA ± 25% @ 24VDC
Type of application program for supervision and setting Setting and changing data via PC Yes Monitoring possibility via PC Turned on the position sent from PC Turning time interval Type of communication Data Type of communication interface Networking solution for control from centre Firmware - Software Upgrading possibility via PC Yes, it turn on position sent from PC, also all other setting can be commanded with string sent from PC 1-15 min. Communication Data Type of communication interface Networking solution for control from centre RS485 Firmware - Software Upgrading possibility via PC Yes, firmware via PC with help of Helios Analytics Electrical Data Motor Power Supply 24 VDC +5% / -15% (2.5A current capacity) SMPS must have 150% inrush current Backup battery CR 2512 coin Standby consumption (when is not moving) 20 mA ± 25% @ 24VDC
Monitoring possibility via PC Turned on the position sent from PC Turning time interval Turning time interval Type of communication interface Networking solution for control from centre Firmware - Software Upgrading possibility via PC Yes, it turn on position sent from PC, also all other setting can be commanded with string sent from PC Turning time interval 1-15 min. USB interface Networking solution for control from centre RS485 Firmware - Software Upgrading possibility via PC Yes, firmware via PC with help of Helios Analytics Electrical Data Motor Power Supply 24 VDC +5% / -15% (2.5A current capacity) SMPS must have 150% inrush current Backup battery CR 2512 coin Standby consumption (when is not moving) 20 mA ± 25% @ 24VDC
Turned on the position sent from PC Yes, it turn on position sent from PC, also all other setting can be commanded with string sent from PC Turning time interval 1-15 min. Communication Data Type of communication interface USB interface Networking solution for control from centre Firmware - Software Upgrading possibility via PC Yes, firmware via PC with help of Helios Analytics Electrical Data Motor Power Supply 24 VDC +5% / -15% (2.5A current capacity) SMPS must have 150% inrush current Backup battery CR 2512 coin Standby consumption (when is not moving) 20 mA ± 25% @ 24VDC
with string sent from PC Turning time interval 1-15 min. Communication Data Type of communication interface USB interface Networking solution for control from centre RS485 Firmware - Software Upgrading possibility via PC Yes, firmware via PC with help of Helios Analytics Electrical Data Motor Power Supply 24 VDC +5% / -15% (2.5A current capacity) SMPS must have 150% inrush current Backup battery CR 2512 coin Standby consumption (when is not moving) 20 mA ± 25% @ 24VDC
Type of communication interface Networking solution for control from centre RS485 Firmware - Software Upgrading possibility via PC Yes, firmware via PC with help of Helios Analytics Electrical Data Motor Power Supply 24 VDC +5% / -15% (2.5A current capacity) SMPS must have 150% inrush current Backup battery CR 2512 coin Standby consumption (when is not moving) 20 mA ± 25% @ 24VDC
Type of communication interface Networking solution for control from centre RS485 Firmware - Software Upgrading possibility via PC Yes, firmware via PC with help of Helios Analytics Electrical Data Motor Power Supply 24 VDC +5% / -15% (2.5A current capacity) SMPS must have 150% inrush current Backup battery CR 2512 coin Standby consumption (when is not moving) 20 mA ± 25% @ 24VDC
Networking solution for control from centre Firmware - Software Upgrading possibility via PC Yes, firmware via PC with help of Helios Analytics Electrical Data Motor Power Supply 24 VDC +5% / -15% (2.5A current capacity) SMPS must have 150% inrush current Backup battery CR 2512 coin Standby consumption (when is not moving) 20 mA ± 25% @ 24VDC
Firmware - Software Upgrading possibility via PC Yes, firmware via PC with help of Helios Analytics Electrical Data Motor Power Supply 24 VDC +5% / -15% (2.5A current capacity) SMPS must have 150% inrush current Backup battery CR 2512 coin Standby consumption (when is not moving) 20 mA ± 25% @ 24VDC
Upgrading possibility via PC Yes, firmware via PC with help of Helios Analytics Electrical Data Motor Power Supply 24 VDC +5% / -15% (2.5A current capacity) SMPS must have 150% inrush current Backup battery CR 2512 coin Standby consumption (when is not moving) 20 mA ± 25% @ 24VDC
Electrical Data Motor Power Supply 24 VDC +5% / -15% (2.5A current capacity) SMPS must have 150% inrush current Backup battery CR 2512 coin Standby consumption (when is not moving) 20 mA ± 25% @ 24VDC
Motor Power Supply 24 VDC +5% / -15% (2.5A current capacity) SMPS must have 150% inrush current Backup battery CR 2512 coin Standby consumption (when is not moving) 20 mA ± 25% @ 24VDC
Backup battery CR 2512 coin Standby consumption (when is not moving) 20 mA ± 25% @ 24VDC
Standby consumption (when is not moving) 20 mA ± 25% @ 24VDC
Power supply connection 1 piece of 2 Wire Cable with an Internal Cu Conductor of 2.5 mm ²
(for lenghts up to 30 m), (not included with kit)
Junction Box 190 (L) x 140 (W) x 70 (H) mm with connection harness
Environmental Data
Operating temperature - 25°C to +70°C (optionally with artic grease for teperatures from -40°C up to +70°C)
Operation at humidity 0% to 100%, relative humidity
Max. safe wind speed max. 120 km/h
Corrosion, weather and chemical resistance
Corrosion, weather and chemical resistance Hot-dip galvanizing (HDC, EN ISO 1461) 75-100 µm (equivalent of 50 years)
Hot-dip galvanizing (HDG, EN ISO 1461) 75-100 μm (equivalent of 50 years)
Hot-dip galvanizing (HDC, EN ISO 1461) 75-100 μm (equivalent of 50 years) Packaging
Hot-dip galvanizing (HDC, EN ISO 1461) 75-100 μm (equivalent of 50 years) Packaging 1 box of 166 (L) x 22 (W) x 27 (H) cm
Hot-dip galvanizing (HDG, EN ISO 1461)75-100 μm (equivalent of 50 years)Packaging1 box of 166 (L) x 22 (W) x 27 (H) cmProduct weight42 kg
Hot-dip galvanizing (HDG, EN ISO 1461) Packaging Dimensions of a packed product 1 box of 166 (L) x 22 (W) x 27 (H) cm Product weight 42 kg Quality Certificates
Hot-dip galvanizing (HDG, EN ISO 1461) Packaging Dimensions of a packed product 1 box of 166 (L) x 22 (W) x 27 (H) cm Product weight 42 kg Quality Certificates International Protection Rating (IEC 60529) 175-100 µm (equivalent of 50 years) 1 box of 166 (L) x 22 (W) x 27 (H) cm 42 kg International Protection Rating (IEC 60529) IP63
Hot-dip galvanizing (HDG, EN ISO 1461) 75-100 µm (equivalent of 50 years) Packaging Dimensions of a packed product 1 box of 166 (L) x 22 (W) x 27 (H) cm Product weight 42 kg Quality Certificates International Protection Rating (IEC 60529) Electromagnetic Compatibility (EMC Directive 89/336/EEC) Yes
Hot-dip galvanizing (HDG, EN ISO 1461) 75-100 µm (equivalent of 50 years) Packaging Dimensions of a packed product 1 box of 166 (L) x 22 (W) x 27 (H) cm Product weight 42 kg Quality Certificates International Protection Rating (IEC 60529) Electromagnetic Compatibility (EMC Directive 89/336/EEC) Low Voltage Equipment Directive (EEC Council Directive 73/23/EEC) Yes







Fixed solar panel

Real energy measurement of two equal solar panels (fixed and motorized)
Three equal solar panels were exposed to the sun and the converted electrical power was measured.

Test conditions: Solar panels (all): 1.0 kWp (producer spec.at AM 1.5), <u>Date</u>: July 2010 Time: 4:00 to 20:00 (sun time), <u>Geo. latitude</u>: 46°N, <u>Weather conditions</u>: sunny

Results: Average energy of fixed: 5016 Wh, Average energy of motorized: 8124 Wh, Note: sum of motor energy consumption through all day at full load is 17.52Wh or 0.22% of all collected energy, Efficiency of the motorized panel: 161,6%



Sat Control d.o.o.

Poženik 10, 4207 Cerklje na Gorenjskem, Slovenia, Phone: +386 4 281 62 00, info@solar-motors.com, info@sat-control.com www.solar-motors.com, www.sat-control.com