

WhisperPower Solar Panels

For cases when energy consumption is limited, purchasing and installing solar panels can be a good solution for providing onboard electrical power. The actual yield is determined by the type of panel, its dimensions, the geographical location and the position of the panel in relation to the sun.




In general, solar panels are used as the power source for basic power requirements and maintenance of the battery. If a land power connection is not available, the solar panels act as the means to keeping the battery under voltage. The yield of the panels is specified in Watts-peak. This is the maximum power and not a constant output.


General features solar panels

- Quality panels from European manufacturers
- Power ranges: 104, 124, 186 Wp and 195, 330 Wp
- Available in: All black monocrystalline or blue polycrystalline
- The panels conform to important standards such as VDE and MCS, and can withstand salt air



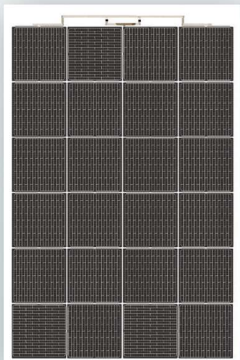


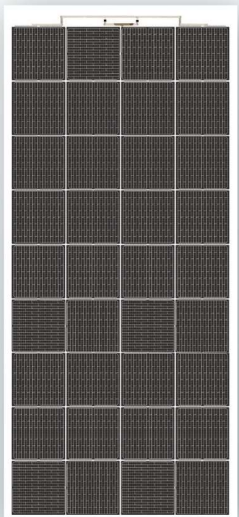
Visit to
calculate
the yield
of a panel



WhisperSolar Flex Series

	104 Wp TOP CLASS	124 Wp FIRST CLASS	186 Wp FIRST CLASS
Article Number	60110437	60110438	60110441





Flexible panels with walkable top layer

- For fixed mounting (sealant) on deck, dock house or motorhome
- Or mounting on railing or rigging (fixing eyes)
- No rear ventilation necessary
- Panels can be walked on

WhisperSolar Flex 104 / 124 / 186 Wp

Monocrystalline modules with thin, light weight and compact cells. Panel can be bent with a maximum radius of 10 cm. These panels are designed for marine and mobile applications and are therefore, wind, water and corrosion resistant. Ideal for charging an 12 or 24 VDC battery. All panels can be supplied with a single-stage regulator. When used for charging AGM or GEL batteries, we recommend installing a multi-stage regulator. The WhisperSolar Flex panels are fitted with DC wires on the back for deck-thru mounting.

Rigid panels with glass top layer

- Monocrystalline or polycrystalline technology
- For fixed mounting in a frame
- 195 and 330 Wp models
- Rear ventilation required
- Cannot be walked on
- MPPT controller available

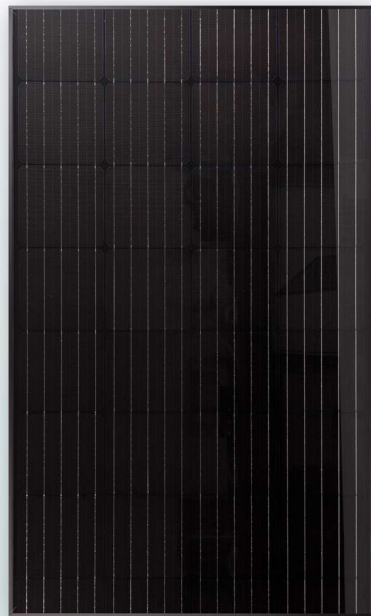
WhisperSolar panels for fixed mounting

The non-flexible panels for permanent installation are extensively used for the marine, mobile and offgrid markets. The price per watt / peak is much more favourable than the specialist "walk on" panels such as the Flex models. The range is made in Europe by a high level manufacturing company. The product range is of very high-quality and meets the highest standards.

We only use industrial grade cells guarantee long life and high efficiency



195 Wp



330 Wp

WhisperSolar Series

Article Number

60110402

60110439



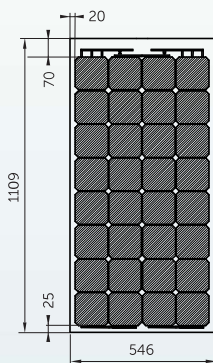
Complete Solar Kit

Solar Charge Controller (starting from page 54)

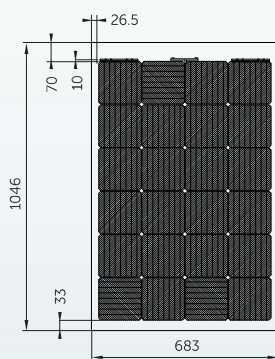
- Install between panel and battery
- Suntrack regulators with and without MPPT technology
- MPPT= Maximum Power Point Tracking converting extra voltage in to charge current. Increases system efficiency by approximately 30 %
- Three step charge process from 15 Amps so suitable for AGM and GEL batteries
- Most Suntrack models are also suitable for Lithium batteries

WhisperSolar Flex Series

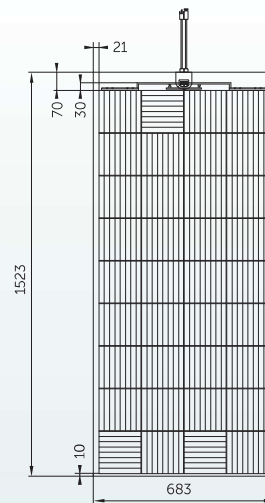
	104 Wp TOP CLASS	124 Wp FIRST CLASS	186 Wp FIRST CLASS
	60110437	60110438	60110441
MAIN SPECIFICATIONS			
Maximum power [W] Wp	104 Wp	124 Wp	186 Wp
Dimensions (W x D x H) in mm	1109 x 546 x 2	1046 x 683 x 2	1523 x 683 x 2
Weight	1.4 kg / 3.1 lb	1.7 kg / 3.7 lb	2.4 kg / 5.3 lb
Maximum power Voltage Vmp	18.2 VDC	12.6 VDC	19.6 VDC
Maximum power Current Imp	5.7 A	9.5 A	9.5 A
Open circuit voltage Voc	21.8 VDC	16 VDC	24 VDC
Short circuit current Isc	6 A	9.8 A	9.8 A
NOCT	45 ± 2 °C	45 ± 2 °C	45 ± 2 °C
Operating temperature	-40 up to 85 °C	-40 up to 85 °C	-40 up to 85 °C
Temp. coeff. Pmax. [%/°C]	-0.38	-0.38	-0.40
Temp. coeff. Voc [%/°C]	-0.27	-0.27	-0.32
Temp. coeff. Isc [%/°C]	0.05	0.05	0.05
Columns x Rows (cells n°)	4 x 8 (32)	4 x 6 (24)	4 x 9 (36)
Maximum system voltage	1000 VDC	1000 VDC	1000 VDC
Maximum reverse current	12 A	12 A	12 A
Safety class	A	A	A



WhisperSolar Flex
104 Wp | Top Class
Art. Nr. 60110437



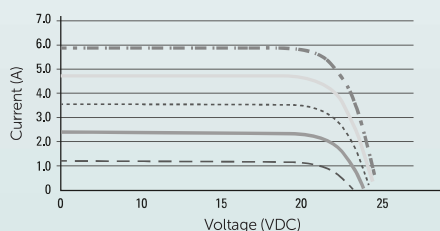
WhisperSolar Flex
124 Wp | First Class
Art. Nr. 60110438



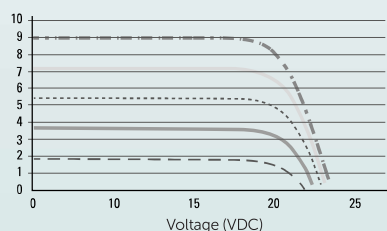
WhisperSolar Flex
186 Wp | First Class
Art. Nr. 60110441

Electrical Characteristics

104 Wp | Top Class



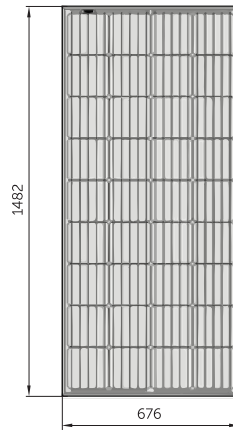
124 Wp | First Class /
186 Wp | First Class



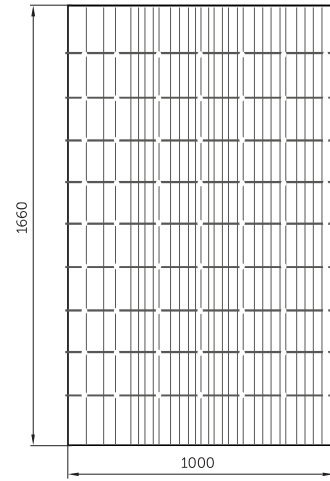
- 100 W/m²
- - - 200 W/m²
- 400 W/m²
- · · 600 W/m²
- 800 W/m²
- - - 1000 W/m²

WhisperSolar Series

	195 Wp	330 Wp
Article Number	60110402	60110439
TECHNICAL SPECIFICATIONS		
Model name	WhisperSolar M	WhisperSolar L
Power rating	195 Wp	330 Wp
Rated current IMPP	9.4 A	9.6 A
Rated voltage VMPP	19.7 VDC	34.4 VDC
Open circuit voltage VOC	23.9 VDC	41.0 VDC
Cell Type	Monocrystalline	Monocrystalline
Temperature range	-40 up to 85°C	-40 up to 85°C
Dimensions (W x D x H) in mm	1482 x 676 x 35	1660 x 1000 x 35
Weight	15 kg / 33.1 lb	18.9 kg / 40.1 lb
Connection	Box on panel	Box on panel
Cable and connectors	Solar cable 4 mm, length 1000 mm, PV4 connectors	
Life span	> 20 years	> 20 years
Voltage regulator (optional)	Suntrack MPPT	Suntrack MPPT



WhisperSolar
195 Wp
Art. Nr. 60110402



WhisperSolar
330 Wp
Art. Nr. 60110439

Installation Parts

- Cable sets from battery to panel
- Mounting kit
- Fixing brackets for mounting on roof



CORNER SUPPORTS
SET OF 4

Art. Nr. 60111422



BRACKET ASSEMBLY
ADHESIVE

Art. Nr. 60111440



BRACKET ASSEMBLY
ACTIVATOR

Art. Nr. 60111441



BRACKET SUPPORTS
680 MM | SET OF 2 PCS

Art. Nr. 60111421



SOLAR CABLE ENTRY

Art. Nr. 60111425

Solar Installation



SOLAR PV
CABLE | 4 MM²

Art. Nr. 60110475



SOLAR PV
CONNECTOR MALE

Art. Nr. 60110415



SOLAR PV
CONNECTOR FEMALE

Art. Nr. 60110416



SOLAR PV Y-CONNECTOR
MALE-MALE-FEMALE

Art. Nr. 60110417



SOLAR PV Y-CONNECTOR
MALE-FEMALE-FEMALE

Art. Nr. 60110418

PWM-Suntrack

Solar Charge Controller

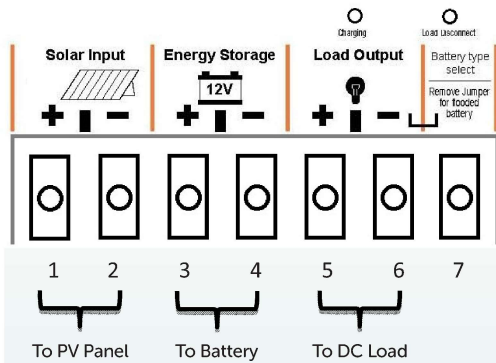
The Suntrack PWM controllers are our step-in models suitable to be installed in solar systems with limited power (trickle charge application)

PWM stands for Pulse Width Modulation technology, based on high efficient transistors. The "raw" energy generated by the sun is converted to a smooth single step charge voltage, allowing the battery to charge fully without overcharging.

This basic controller is available for 10 and 20 A output current. Charge voltage can be set according to the battery chemistry applied.



Connections of the PWM



Suntrack PWM Series

	12 VDC 10 A	12 VDC 20 A
Article Number	60110409	60110411
DC INPUT		
Maximum PV voltage	26 VDC	26 VDC
Maximum PV current	10 A	20 A
Voltage across PV & Battery	< 0.15 VDC	< 0.15 VDC
DC OUTPUT BATTERY		
Battery rating	12 VDC	12 VDC
Battery type	AGM, GEL and Lead acid	AGM, GEL and Lead acid
Maximum charge current	10 A	20 A
Charge voltage range	14.2 - 14.6 VDC	14.2 - 14.6 VDC
Float voltage range	13.4 - 13.8 VDC	13.4 - 13.8 VDC
Parasitic current	< 10 mA	< 15 mA
DC OUTPUT (LOAD)		
Load current (continuous)	10 A	20 A
PROTECTION		
PV Reverse Polarity	Protected	Protected
Battery overcharge	Yes	Yes
Load over-discharge voltage	< 11.5 VDC	< 11.5 VDC
Load reconnected voltage	12.6 VDC	12.6 VDC
Built-in temperature sensor	Yes, temperature compensation on charging voltage	
INDICATOR		
Indicators	Charging/Load Disconnect LED Indicator	
ENCLOSURE		
Input/Output connection	Heavy duty terminals	Heavy duty terminals
Dimensions (W x D x H) in mm	100 x 33 x 100	100 x 33 x 100
Weight	0.2 kg / 0.4 lb	0.2 kg / 0.4 lb



Suntrack 50

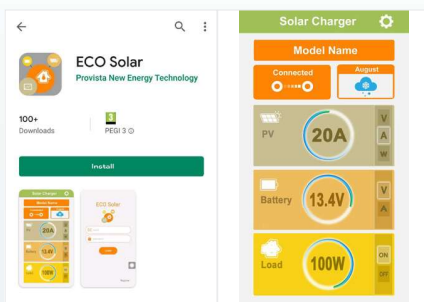
MPPT Solar Charge Controller

The WhisperPower Suntrack 50 MPPT Solar Charge controller is connecting solar panels (PV) to a 12, 24, 36 or 48 VDC battery.

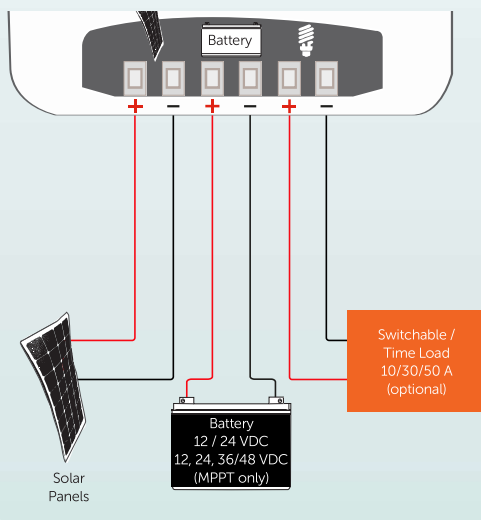
The advanced MPPT (Stand for Maximum Power Point Tracking) technology applied ensures a fast and complete charge, even under cloudy and fluctuating weather circumstances. The Suntrack 50 comes with a monitoring APP and bluetooth connection.



EcoSolar App



Installation Example



Suntrack 50

12-48 VDC | 50 A

Article Number	60111436
PV INPUT	
PV maximum open circuit voltage (VDC)	135 VDC
MPPT voltage	16 - 108 VDC
Maximum PV input power	12 VDC Battery 700 W 24 / 48 VDC Battery 1400 W
Maximum MPPT current	12 / 24 VDC / 50 A 36 VDC / 35 A 48 VDC / 25 A
DC OUTPUT	
Battery voltage	12 / 24 / 36 / 48 VDC
Battery capacity	≥ 50 Ah
Output current	50 A maximum
Constant voltage charging voltage	STD: 14.4 VDC 43.2 VDC / 5 7.6 VDC LI: 14.5 VDC AGM: 14.6 VDC / 29.2 VDC / 43.8 VDC / 58.4 VDC
LOAD OUTPUT	
Output voltage	12 / 24 / 36 / 48 VDC
Output current	50 A
Output protection current	55 A
USB OUTPUT	
Output voltage	5 VDC
Maximum output current	3.4 A maximum
Standby current	Battery input 12 VDC
Solar charger	< 60 mA
Solar charger + Wifi module	< 160 mA
PROTECTIVE FUNCTION	
PV/Battery input high/low voltage protection	Yes
PV/Battery reverse connection protection	Yes
Load overcurrent/short circuit protection	Yes
Temp protection	Yes (90°C)
Operation Temperature	-10 up to 40°C
DIMENSIONS	
Dimensions (W x D x H) in mm	238 x 73 x 177
Weight	2.3 kg / 5.1 lb

Suntrack Duo

12 VDC | 50 A - 24 VDC | 30 A

With our state of the art, easy to use design, this product will offer you reliable service for providing a multi-stage, multi-input battery charger to charge the different types of batteries you have installed in either your home, boat, RV, caravan, 4WD or commercial vehicle. The unit can also be used as a charger/booster between the propulsion engine's alternator/ starter battery and the service battery by utilizing the 2nd DC input.

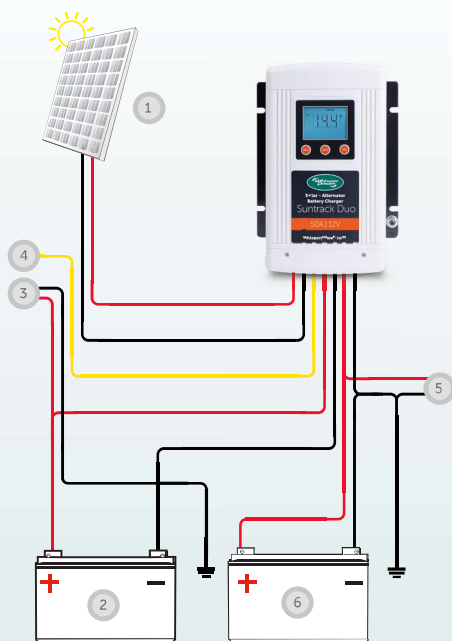


12 VDC 50 A	24 VDC 30 A
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Suntrack Duo Series

Article Number	60111430	60111431
OUTPUT RATING		
Output Current (Maximum)	50 A	30 A
Output Voltage	12 VDC Nominal	24 VDC Nominal
Output Power	775 W	930 W
CHARGER DC OUTPUT- HOUSE BATTERY (CH1)		
Selectable Battery Type	AGM, GEL, Lead acid, Lithium	
Bulk /Float Voltage Range		
GEL:	14.4 / 13.7 VDC	28.8 / 27.4 VDC
AGM:	14.6 / 13.6 VDC	29.2 / 27.2 VDC
Lead acid:	14.4 / 13.3 VDC	28.8 / 26.6 VDC
Lithium:	13.9 – 14.6 VDC	27.8 – 29.2 VDC
Program:	13.8 – 14.8 VDC	27.6 – 29.6 VDC
Restart Voltage (GEL, AGM, Lead acid, Program)	12.5 VDC	25 VDC
Restart Voltage (Lithium)	13.3 VDC	26.6 VDC
Charger Current (User Selectable)	5 - 50 A (5 A steps)	5 / 10 / 20 / 30 A
Equalized Voltage (Flooded Battery only)	15.5 VDC	31 VDC
Equalized Charging Current	10 % of Bulk Current Setting	
Charging Control	AGM, GEL, Lead acid, Program Mode: Two or Three Stages Lithium: three stages only	
DC Output Bank	Single	Single
Current draw from CH1 with unit ON	< 70 mA	< 70 mA
Current draw from CH1 with Unit OFF	< 200 µA	< 200 µA
Battery Temperature Setting	Low / Normal / High (automatically overridden with optional BTS)	
Efficiency	95 %	95 %
Minimum Operating Voltage	8 VDC	16 VDC
DC INPUT - SOLAR ARRAY/PANELS (CH2- SOLAR)		
Input Voltage	14.5 – 50 VDC	14.5 – 50 VDC
Maximum Solar Input Current	30 A	30 A
Maximum Solar Input Power: 12 VDC Panel	600 W	600 W
24 VDC Panel	800 W	1080 W
DC INPUT – ALTERNATOR/ START BATTERY (CH3- ALTERNATOR/START)		
Input Voltage	10.5 – 16 VDC / 21 – 32 VDC	
Maximum Input Current (as per maximum setting)	50 A	50 A
WEIGHT AND DIMENSIONS		
Dimensions (W x D x H) in mm	172 x 74 x 242	172 x 74 x 242
Weight	1.9 kg / 4.1 lb	1.9 kg / 4.1 lb

SunTrack Duo Diagram



1. Solar panel
2. Starter Battery
3. Engine Alternator
4. Ignition Control (D+)
5. DC Output
6. Service Battery



Suntrack Pro

MPPT Solar Charge Controller



Suntrack Pro Series

	12-48 VDC 40 A			12-48 VDC 65 A			12-48 VDC 80 A *)		
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Article Number	60110423			60110420			60110421		
ELECTRICAL CHARACTERISTICS PV ARRAY SIDE									
Nominal battery voltage	12 VDC	24 VDC	48 VDC	12 VDC	24 VDC	48 VDC	12 VDC	24 VDC	48 VDC
Maximum Solar power 12 VDC	625 W	1250 W	2500 W	1000 W	2000 W	4000 W	1250 W	2500 W	5000 W
Maximum Solar power 24 VDC	80 VDC	150 VDC	150 VDC	80 VDC	150 VDC	150 VDC	80 VDC	150 VDC	150 VDC
Maximum Solar operating voltage	75 VDC	145 VDC	145 VDC	75 VDC	145 VDC	145 VDC	75 VDC	145 VDC	145 VDC
Minimum Solar operating circuit voltage	above battery voltage			above battery voltage			above battery voltage		
ELECTRICAL CHARACTERISTICS BATTERY SIDE									
Maximum Output Current	40 A			65 A			80 A		
Nominal Battery Voltage automatic/manual set	12, 24 or 48 VDC			12, 24 or 48 VDC			12, 24 or 48 VDC		
Operating voltage range	Above battery voltage, minimum 7 VDC			Above battery voltage, minimum 7 VDC			Above battery voltage, minimum 7 VDC		
PERFORMANCE OF THE DEVICE									
Power Conversion efficiency (in a 48 VDC typical-system)	> 98 %			> 98 %			> 98 %		
Maximum Stand-By Self-Consumption (48 VDC)	25 mA > 1.2 W			25 mA > 1.2 W			25 mA > 1.2 W		
Maximum Stand-By Self-Consumption (24 VDC)	30 mA > 0.8 W			30 mA > 0.8 W			30 mA > 0.8 W		
Maximum Stand-By Self-Consumption (12 VDC)	35 mA > 0.5 W			35 mA > 0.5 W			35 mA > 0.5 W		
Charging stages	4 stages: Bulk, Absorption, Float, Equalization								
Battery temperature compensation	-3 mV / °C / cell (25°C ref) default value adjustable -8 to 0 mV / °C								
ELECTRONIC PROTECTIONS									
PV reverse polarity	up to -150 VDC			up to -150 VDC			up to -150 VDC		
Battery reverse polarity	up to -150 VDC			up to -150 VDC			up to -150 VDC		
Battery overvoltage	up to -150 VDC			up to -150 VDC			up to -150 VDC		
Over temperature	Protected			Protected			Protected		
Reverse current at night	Prevented by relays			Prevented by relays			Prevented by relays		
ENVIRONMENT									
Operating Ambient Temperature Range	-20 up to 55°C			-20 up to 55°C			-20 up to 55°C		
Humidity	100 %			100 %			100 %		
Ingress Protection of enclosures	IP54, IEC/EN 60529:2001			IP54, IEC/EN 60529:2001			IP54, IEC/EN 60529:2001		
Mounting location	interior			interior			interior		
GENERAL DATA									
Warranty	5 years			5 years			5 years		
Weight	3.8 kg / 8.4 lb			5.2 kg / 11.5 lb			5.5 kg / 12.1 lb		
Dimensions (W x D x H) in mm	220 x 120 x 310			220 x 120 x 310			220 x 120 x 350		
Parallel operation (separated PV arrays)	yes			yes			yes		
Maximum wire size	35 mm ²			35 mm ²			35 mm ²		
Glands	M20 x 1.5			M20 x 1.5			M20 x 1.5		
COMMUNICATIONS									
Network Cabling	communication bus			communication bus			communication bus		
Menu languages	English/French/German/Spanish			English/French/German/Spanish			English/French/German/Spanish		
CONFORMITY									
CE compliant	EMC 2004/108/CE LV 2006/95/CE RoHS 2002/95/CE								
Safety	IEC/EN 62109-1:2010								
EMC (Electro Magnetic Compatibility)	IEC/EN 61000-6-3:2011 IEC/EN 61000-6-1:2005								

*1 Also available as WP Suntrack, 600 VDC, 3.5 kW or 600 VDC, 7 kW



SUNTRACK PRO

WPC-CAN to CAN interface required as interface to WhisperConnect, for being compatible with WhisperTouch panels

CAN TO CAN

WPC CAN to CAN Interface Art. Nr. 60201108

WHISPERTOUCH

Art. Nr. 40280105 - 5 inch
Art. Nr. 40280101 - 7 inch
Art. Nr. 40280102 - 10 inch