



What is a SolarEdge P320?

The SolarEdge P320 is a power optimizer specifically designed for use with 60-cell modules that have nameplate ratings of between 300 and 320 W DC. It can be attached to most PV mounting systems using a single fastener, and grounding can be accomplished via the included star washer, a WEEB, or through a lug, depending on racking.

Can I mix p600/p700 with p300/p400 in one string?

It is not allowed to mix P600/P700 with P300/P400 in one string. (4) In a case of odd number of PV Modules in one string it is allowed to install one P600/P700 power optimizer connected to one PV Module. (5) P700 design with three phase 208V inverters is limited. Use the SolarEdge Site Designer for verification.

Can p485 power optimizer be used with multiple PV modules?

Modules with up to +5% power tolerance are allowed. For other connector types please contact SolarEdge. For dual version for parallel connection of two modules use the P485. In the case of an odd number of PV modules in one string, installing one P485 dual version power optimizer connected to one PV module is supported.

How much power tolerance can a SolarEdge module have?

Module of up to +5% power tolerance allowed © SolarEdge Technologies Ltd. All rights reserved. SOLAREEDGE, the SolarEdge logo, OPTIMIZED BY SOLAREEDGE are trademarks or registered trademarks of SolarEdge Technologies, Inc. All other trademarks mentioned herein are trademarks of their respective owners.

Can I mix p404/p485/p505/p601 and p370/p500 in one string?

When connecting a single module, seal the unused input connectors using the supplied pair of seals. For ambient temperatures above +70°C / +158°F power de-rating is applied. Refer to Power Optimizers Temperature De-Rating Technical Note for more details. (5) It is not allowed to mix P404/P485/P505/P601 with P370/P401/P500 in one string.

P320 SOLAR EDGE INVERTER OPTIMIZER STRING SIZE DATA SHEET



Is the term 'SolarEdge' a registered trademark?

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1: Activating the System 43 Step 2: Pairing Power
Optimizers to the Inverter 45 Step 3: Verifying
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Power optimizers with SolarEdge's new IndOP???
(Independent Optimization) technology can operate
without additional hardware interface and work
directly with any non-SolarEdge inverter as well as
with the broad range of SolarEdge inverters. Power
optimizers with P/N starting with "OPI", "OPJ" or
"PxxxI" have the IndOP??? feature.

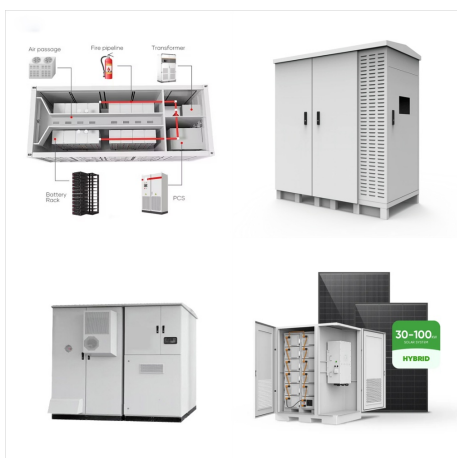
P320 SOLAR EDGE INVERTER OPTIMIZER STRING SIZE DATA SHEET



Specifically designed to work with SolarEdge inverters High efficiency with module-level MPPT, for maximized system energy production and revenue, and fast project ROI Minimum String Length (Power Optimizers) P400, P401 8 10 18 P485, P505 6 8 14 Maximum String Length (Power Optimizers) 25 25 50 Maximum Power per String

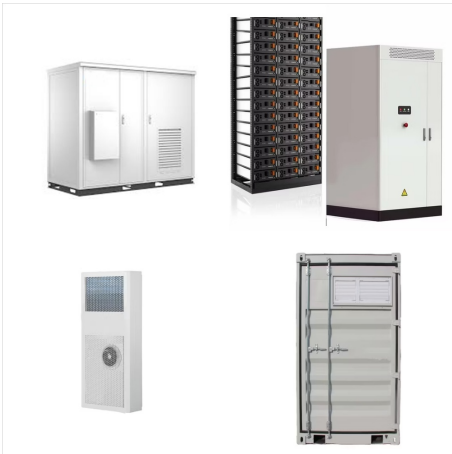


Power Optimizer Specifications ??? P300 / P350 / P400 / P405 SolarEdge Power Optimizers 1 1 Power Optimizer Specifications ??? P300 / P350 / P400 / P405 P300 P350 P400 P405 INPUT Rated Input DC Power(1) 300 350 400 405 W Absolute Maximum Input Voltage (Voc) 48 60 80 125 Vdc MPPT Operating Range Vdc8 -48 60 80 12.5 - 105 Maximum Short Circuit Current ???



Maximum String Length Power Optimizers 30 Compatible SolarEdge Inverters Three phase inverters Maximum Allowed System Voltage 1000 Vdc Dimensions (W x L x H) 128 x 168 x 59 / 5 x 6.61 x 2.32 mm / in It is not allowed to mix P860 with P730/P800p/P850 in one string or to mix with P300/P320/P400/P405 in one string. (6)

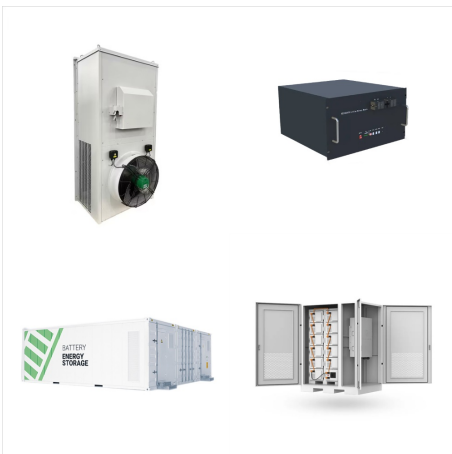
P320 SOLAR EDGE INVERTER OPTIMIZER STRING SIZE DATA SHEET



Specifically designed to work with SolarEdge inverters Certified Zep Compatible™ bracket P320-ZEP, P400-ZEP Optimizer model (typical module compatibility) P320-ZEP (for 60-cell modules) Maximum String Length (Power Optimizers) 25 25 50(4) Maximum Power per String 5700 (6000 with SE7600H-US)

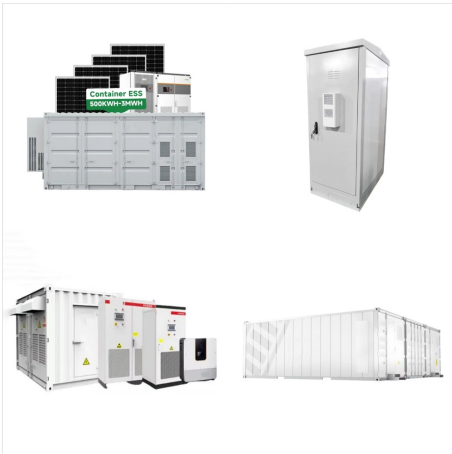


Discount pricing on SolarEdge P320 Power Optimizers for PV systems up to 1000 volts. Trusted authorized SolarEdge wholesale supplier. ensures a SolarEdge power optimized solar system is always working at its optimal input voltage over a wider range of string lengths and regardless of the environmental conditions of your solar system



OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM SOLAREEDGE INVERTER OR SOLAREEDGE INVERTER OFF) Safety Output Voltage per Power Optimizer 1 ? 0.1 Vdc: Minimum String Length (Power Optimizers) P320, P370, P400 8 10: 18 P405 / P505 6: 8 14: Maximum String Length (Power Optimizers) 25: 25 50 (5) Maximum Power per String

P320 SOLAR EDGE INVERTER OPTIMIZER STRING SIZE DATA SHEET



Minimum String Length Power Optimizers 14 PV
Modules 27 Maximum String Length Power
Optimizers 30 Compatible SolarEdge Inverters
Three phase inverters Maximum Allowed System
Voltage 1000 Vdc Dimensions (W x L x H) 129 x
168 x 59 / 5.1 x 6.61 x 2.32 mm / in



POWER OPTIMIZER. P320 / P370 / P400 / P405 /
P505. Specifically designed to work with SolarEdge
inverters Up to 25% more energy Superior efficiency
(99.5%) Minimum String Length (Power Optimizers)
P320, P370, P400 8 10: 18 P405 / P505 6: 8 14:
Maximum String Length (Power Optimizers) 25:



Minimum and Maximum String Length The minimum
number of optimizers per string depends on the
"Maximum Output Voltage" of the optimizer and on
the "Nominal DC Input Voltage" of the inverter: the
optimizers connected in series in the string must be
able to achieve the inverter's nominal voltage.

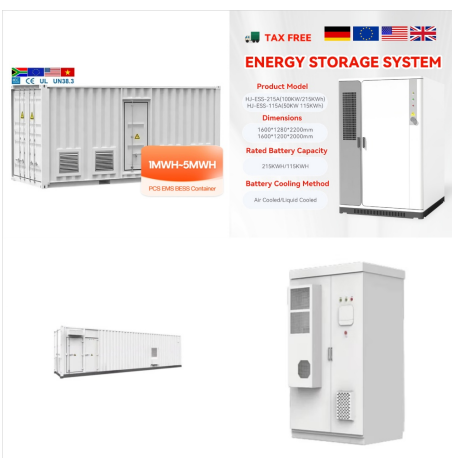
P320 SOLAR EDGE INVERTER OPTIMIZER STRING SIZE DATA SHEET



SolarEdge Inverter Power Optimizer connected to a Non-SolarEdge Inverter** InPut Rated Input DC Power* 300 W Absolute Maximum Input Voltage (Voc) 55 Vdc Maximum String Length (Power Optimizers) 25 50 Maximum Power per String 5250 11250 W Parallel Strings of Different Lengths Yes No

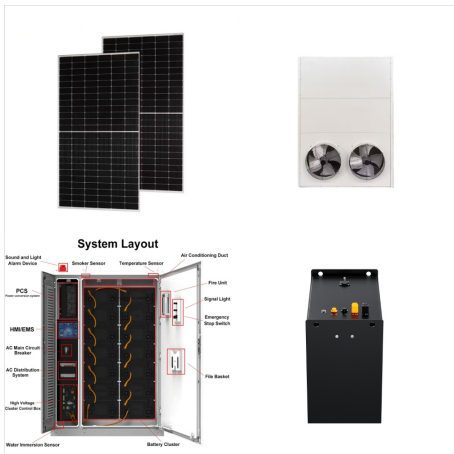


optimizers in the string in the same way. The minimum and maximum string length should be according to the power optimizer datasheet. Strings DO NOT have to be of equal length. 2 Verify proper connection of power optimizers: Before the inverter is turned ON, each power optimizer produces 1V safety-voltage. Use a voltmeter to verify it for each



SolarEdge P320 > 320W Power Optimizer with MC4 connectors . For high-power 60-cell modules MC4 Input Connectors, MC4 Output Connectors, 36" PV Wire, 1000 Max Vdc the power optimizers automatically maintain a fixed string voltage, allowing optimal efficiency of the SolarEdge inverter and giving installers greater flexibility to design

P320 SOLAR EDGE INVERTER OPTIMIZER STRING SIZE DATA SHEET



Specifically designed to work with SolarEdge inverters Up to 25% more energy Superior efficiency (99.5%) Minimum String Length (Power Optimizers) P320, P370, P400 8 10 18 P405 / P505 6 8 14 Maximum String Length (Power Optimizers) 25 25 50(6) Maximum Power per String 5700 (6000 with SE7600-US - SE11400-US) 5250 6000(7) 12750(8) W



than 1%, it is recommended to use optimizers with a higher output voltage or multiple strings, where possible. When the inverter AC nameplate is lower or equal to the maximum nominal string power for the connected inverter (mentioned in the optimizer's data-sheet), all power optimizers can be connected to a single string, as long as the



OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM SOLAREEDGE INVERTER OR SOLAREEDGE INVERTER OFF) Safety Output Voltage per Power Optimizer 1 ? 0.1 Vdc Minimum String Length (Power Optimizers) P320, P370, P400 8 10 18 P405 / P505 6 8 14 Maximum String Length (Power Optimizers) 25 25 50(5) Maximum Power per String 5700 ???

P320 SOLAR EDGE INVERTER OPTIMIZER STRING SIZE DATA SHEET



A single PV string refers to Power Optimizers that are connected using their output cables to form a string. In new installations, do NOT mix S-series and P-series Power Optimizers in the same string. When adding a new Power Optimizer use SolarEdge Designer to verify that the specifications of the PV module such as the power, I_{SC} and V_{oc} (at



P300 / P320 / P400 / P405 Up to 25% more energy
Superior efficiency (99.5%) (POWER OPTIMIZER
CONNECTED TO OPERATING SOLAREEDGE
INVERTER) Maximum Output Current 15 Adc
Maximum Output Voltage 60 85 Vdc Maximum
String Length (Power Optimizers) 25 25 50
Maximum Power per String 5250 6000 12750 W



Compatible SolarEdge Inverters Three Phase
Inverter SE16K & larger Maximum Allowed System
Voltage 1000 Vdc Minimum String Length Power
Optimizers 14 14 15 14 PV Modules 14 27 14 27 15
29 14 27 Maximum String Length Cautionary Note
Regarding Market Data and Industry Forecasts:
This brochure may contain

P320 SOLAR EDGE INVERTER OPTIMIZER STRING SIZE DATA SHEET



SolarEdge Optimizer Module Add-On Model P320, 320 Watt - For 60-cell PV modules. To be used with Single-Phase Inverters Model: P320: Base Price: \$71.64 the power optimizers monitor the performance of each module and communicate performance data to the SolarEdge monitoring portal for enhanced, cost-effective module-level maintenance

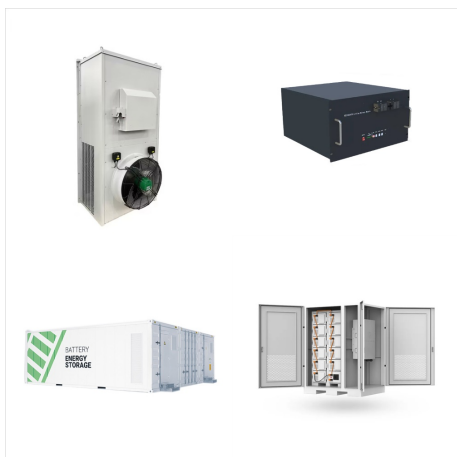


SolarEdge P320 320W DC Power Optimizer for 60-cell solar modules. The power optimizer increases energy output from the PV module by constantly tracking the maximum power point (MPPT) of the module individually. Performance data can be monitored for enhanced, cost-effective module-level maintenance.



Speciically designed to work with SolarEdge inverters Up to 25% more energy Flexible system design for maximum space Minimum String Length 8 (Power Optimizers) P320, P340, P370, P400 10 18 P405 / P505 6 8 14 Maximum String Length (Power Optimizers) 25 25 50(6) Maximum Power per String 5700 (6000 with SE7600-US - SE11400-US) 5250 6000(7)

P320 SOLAR EDGE INVERTER OPTIMIZER STRING SIZE DATA SHEET



When working with SolarEdge inverters, Power Optimizers let you increase your design possibilities by automatically maintaining a fixed string voltage. This enables even greater flexibility and minimizes time onsite with fewer, longer strings (up to 23kW per string) and strings of different lengths.



PV SYSTEM DESIGN USING A SOLAREEDGE INVERTER (3)(4) THREE PHASE 208V THREE PHASE 480V Compatible Power 5)Optimizers P600, P700 P600, P700 Minimum String Length Power Optimizers 8 13 PV Modules 16 26 Maximum String Length Power Optimizers 30 30 PV Modules 60 60 Maximum (7)Power per String 6000(6) 12750 W Parallel Strings of Different ???



OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM SOLAREEDGE INVERTER OR SOLAREEDGE INVERTER OFF) Safety Output Voltage per Power Optimizer 1 ? 0.1 Vdc Minimum String Length (Power Optimizers) P320, P340, P370, P400, P401 8 10 18 P405, P485, P505 6 8 14 Maximum String Length (Power Optimizers) 25 25 50(8)

P320 SOLAR EDGE INVERTER OPTIMIZER STRING SIZE DATA SHEET



PV System Design Using a Solaredge Inverter(6)
Single Phase HD-WAVE Single Phase Three Phase
Residential(7) Three Phase Commercial Minimum
String Length (Power Optimisers) P320, P370, P500
8 8 per array 16 P404, P485, P505 6 7 per array 14
Maximum String Length (Power Optimisers) 25 25
per array 50 Maximum Power per String 5700 (6000
with



NOTES ??? Support for all phased-out P-Series
Optimizer models through SolarEdge support
centers will continue with a compatible replacement
while supplies last, followed by replacement with
compatible replacements Service Part numbers
from S-Series. ??? In the case of a retrofit
installation or RMA replacement, you may need to
mix P-series and S-series on the same string.



Minimum String Length (Power Optimizers) S440 8
10 18 S500B, S650B 6 8 14 Maximum String
Length (Power Optimizers) 25 50(7) Maximum
Usable Power Delivered per String 5700 6000
12,750 W Maximum Allowed Connected Power per
String(9)(10) Inverters with Rated AC Power ???
5700W Per the inverter's maximum input DC
power(8) One string: 7200 Two