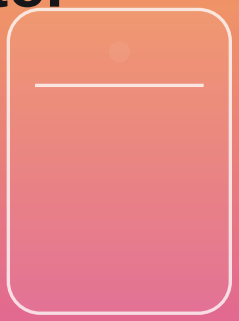
POWERLILY

STRING INVERTER | DATA SHEET

Powerlily Sample String Inverter

PL-5000S

A fictional 5 kW grid-tied string inverter for Powerlily design exercises, electrical modeling, and proposal demonstrations.



POWERLILY SAMPLE EQUIPMENT

Key specifications	
Rated AC power	**5.0 kW**
MPPTs	**2**
Max DC power	**7.5 kW**
Efficiency	**97.5%**
MPPT operating range	**100-550 V**
Nominal AC voltage	**240 V**
Dimensions (H x W x D)	**17.7 in x 14.6 in x 5.7 in**
DC optimizer policy	**Optional**

Flexible DC design

Two MPPTs with two strings per MPPT support common residential array layouts.

Wide operating window

Representative 100-550 V MPPT range with a 600 V maximum input voltage.

Optimizer optional

The sample pass-through PL-600O can be added without replacing inverter MPPT behavior.

Powerlily Sample String Inverter

PL-5000S | SAMPLE DATA

Product details	
Model number	PL-5000S
Description	Sample string inverter for standard grid-tied PV systems.
Inverter type	String
Limited warranty	12 years

DC input	
Maximum DC power	7,500 W
Maximum DC power per MPPT	4,000 W
Number of MPPTs	2
Strings per MPPT	2
Maximum input voltage (Voc)	600 V
Minimum input voltage	80 V
MPPT operating range	100-550 V
Maximum input current	26.0 A
Maximum short-circuit current	30.0 A

AC output	
Rated AC power	5,000 W
Nominal AC voltage	240 V
Efficiency	97.5%

Mechanical data	
Dimensions (H x W x D)	17.7 in x 14.6 in x 5.7 in
Weight	25.4 lb

Compatibility	
DC optimizer policy	Optional
Compatible sample optimizer	Powerlily PL-600O
Optimizer electrical behavior	Pass-through MPPT