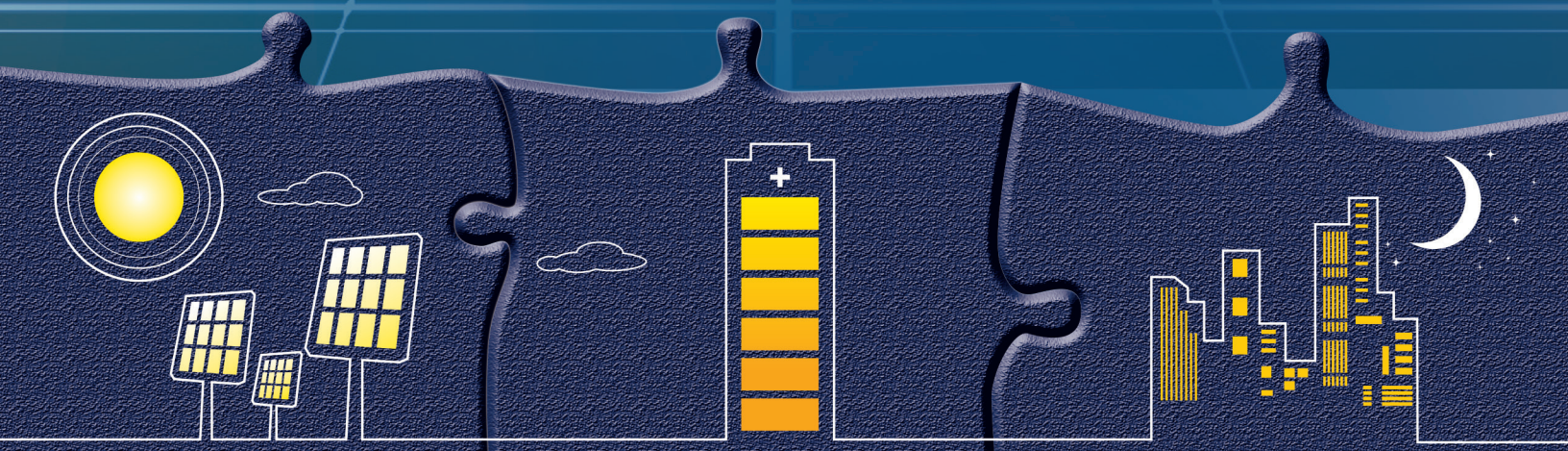
IDEAL POWER

Grid-Tied Commercial PV String Inverter

	The SunDial™ Plus
Model Number	30PV+S
Power Flows	DC: PV → AC
Installed PV Combiner	✔
Grounded DC Configuration w/Fused GFDI Protection	✔
Battery Support	✔
PV MPPT Support	✔

Your all-in-one SOLUTION to the SOLAR + STORAGE PUZZLE



DIAL UP YOUR SUN

The SunDial Plus™
Grid-Tied Commercial PV String Inverter
Specifications*

30 kW

PORT AC1: Unidirectional AC

Wiring Configuration	3 wire delta	**Nominal Power Factor**	> 0.99 at rated output power
Maximum AC Power	29.99 kW	**Power Factor Range**	Programmable: 0.95 leading to 0.95 lagging
Continuous Output Power Rating	29.99 kW	**Reactive Power Range**	Programmable: +18 kVAR to -18 kVAR
Nominal AC Current	37 A	**CEC Efficiency**	95%
Maximum AC Current	44 A	**Peak Efficiency**	95.5%
Nominal Output Voltage	480 Vac	**Tare Losses**	25 W
Output Voltage Range	422 Vac to 528 Vac	**Current Harmonics**	< 5% THD
Nominal Output Frequency	60 Hz	**Available Control Methods**	NET, IDLE, GRID POWER
Frequency Range	55 Hz to 65 Hz		

PORT DC2: PV

Maximum DC Power	30 kW	**Integrated PV Combiner**	Yes: 6 Strings
Maximum DC Current	60 A	**Integrated DC Disconnect**	Yes
Absolute Max Voltge (Voc)	1000 Vdc	**Wiring Configurations**	Grounded Monopolar
Operating Voltage Range	100 Vdc to 1000 Vdc	**GFDI protection**	1 A: fused
Full Power Voltage Range	500 Vdc to 1000 Vdc	**Available Control Methods**	MPPT
Integrated DC Filter	No		

PORT DC3: Battery

Maximum DC Power	30 kW	**Integrated DC Filter**	Yes: Differential Choke
Maximum DC Current	60 A	**Integrated DC Disconnect**	No
Absolute Max Voltge (Voc)	1000 Vdc	**Wiring Configurations**	DC3 & DC2 use the same common return
Operating Voltage Range	100 Vdc to 1000 Vdc	**GFDI protection**	1 A: fused
Full Power Voltage Range	500 Vdc to 1000 Vdc	**Available Control Methods**	IDLE, NET, POWER, CURRENT

Environmental

Transient Overvoltage:	AC and DC MOVs in Wiring Trays, field replaceable	**Relative Humidity Range**	0 to 100% (non-condensing)
Operating Temperature Range	-25 to 50°C full power, derated >50°C	**Cooling**	Forced convection with variable speed fan
Storage Temperature Range	-40 to 85°C (non-operating)		

Certification and Standards

UL1741, UL1741SA, and IEEE1547a	Yes
SunSpec Smart Inverter Features	Models: 1, 103, 120, 121, 122, 123, 126, 129, 130, 132, 134, 135, and 136 -pending
CA Rule 21, PJM, RoHS and REACH Compliant	Yes

General

Enclosure Size	20.5"W x 52" H x 16"D	**5 Year Limited Warranty**	Standard, extensions available
Weight	~150 lbs	**Black Box Recorder**	Yes
Mounting	Vertical Wall Mount, brackets included	**Spare Package (FRUs)**	Available
Enclosure Rating / Material	NEMA-3R / powder-coated aluminum	**Monitoring/Control Interfaces**	RS485 Modbus RTU - 2W/ Modbus TCP over Ethernet
Hinged wiring access panel	Yes	**Remote FW Updates**	Yes: via Ethernet
Galvanic Isolation between AC and DC Ports	Yes: internal high-frequency Link Transformer	**Supported Power Flows**	PV → Grid PV → Grid+Batt PV+Batt → Grid

idealpower.com
*Specifications subject to change
Ordering Part Number: 30PV+S

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