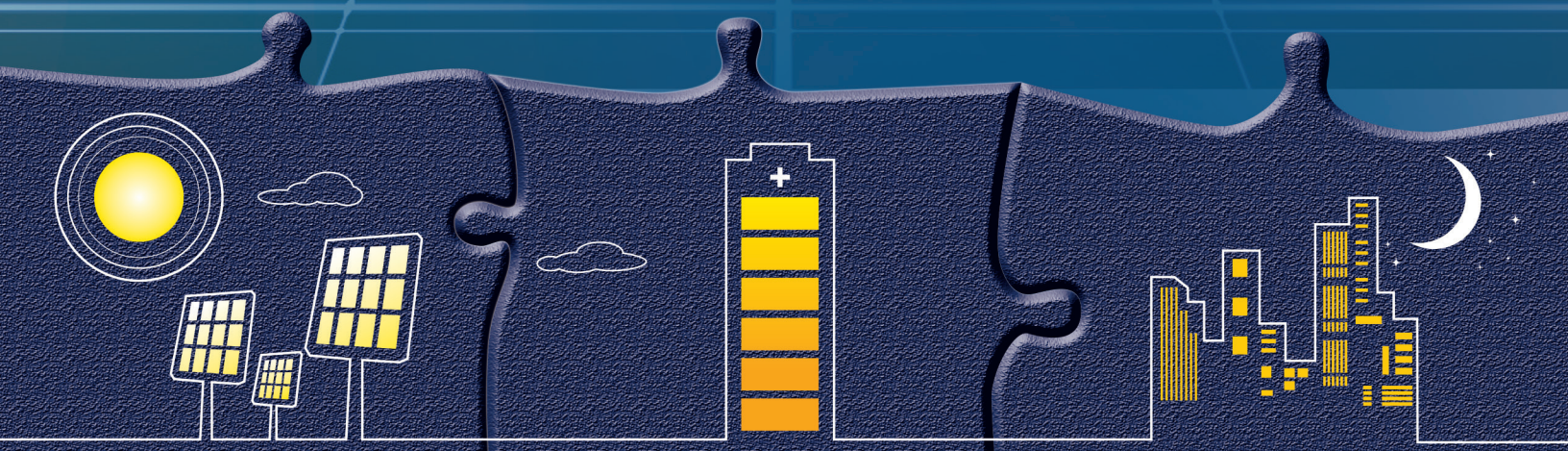
IDEAL POWER

Grid-Tied Commercial PV String Inverters

	Solar First		Storage Ready	
	The SunDial™		The SunDial™ Plus	
Model Number	30PV	30PVF	30PV+S	30PVF+S
Power Flows	PV → AC		DC: PV → AC	
Installed PV Combiner	✔	✔	✔	✔
Grounded DC Configuration w/Fused GFDI Protection	✔		✔	
Floating DC Configuration w/IMI Protection		✔		✔
Battery Support			✔	✔
PV MPPT Support	✔	✔	✔	✔
Certified Field Upgrade Capable (+S)	✔	✔		

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



DIAL UP YOUR SUN

The SunDial™
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
Nominal AC Current	37 A	**Reactive Power Range**	Programmable: +18 kVAR to -18 kVAR (+S)
Maximum AC Current	44 A	**CEC Efficiency**	95%
Nominal Output Voltage	480 Vac	**Peak Efficiency**	95.5%
Output Voltage Range	422 Vac to 528 Vac	**Tare Losses**	25 W
Nominal Output Frequency	60 Hz	**Current Harmonics**	< 5% THD
Frequency Range	55 Hz to 65 Hz	**Available Control Methods**	NET, IDLE, GRID POWER (+S)

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 / Floating
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 (+S upgrade option) *Solar First. Storage Ready.*

Maximum DC Power	30 kW	**Integrated DC Filter**	Yes: Differential Choke (+S)
Maximum DC Current	60 A	**Integrated DC Disconnect**	No
Absolute Max Voltge (Voc)	1000 Vdc	**Wiring Configurations**	DC3 & DC2 use the same common return, therefore both DC2 & DC3 must both be floating or grounded
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, IEEE1547a, IEC62109-1, 2	Yes
SunSpec Smart Inverter Features, UL1741SA	Models: 1, 103, 120, 121, 122, 123, 126, 129, 130, 132, 134, 135, and 136 -pending
CA Rule 21, HECO, PJM Compliant	Pending
RoHS and REACH Compliant	Yes

General

Enclosure Size	20.5"W x 52" H x 16"D	**Black Box Recorder**	Yes
Weight	~150 lbs	**Spare Package (FRUs)**	Available
Mounting	Vertical Wall Mount, brackets included	**Monitoring/Control Interfaces**	RS485 Modbus RTU - 2W/ Modbus TCP over Ethernet
Enclosure Rating / Material	NEMA-3R / powder-coated aluminum	**Remote FW Updates**	Yes: via Ethernet
Hinged wiring access panel	Yes	**Supported Power Flows 30PV/30PVF**	PV → Grid
Galvanic Isolation between AC and DC Ports	Yes: internal high-frequency Link Transformer	**Supported Power Flows 30PV + S/ 30PVF + S**	PV → Grid PV → Grid+Batt (+S), PV+Batt → Grid (+S)
5 Year Limited Warranty	Standard, extensions available		

idealpower.com

*Specifications subject to change

Ordering Part Number: 30PV (Grounded, PV only); 30PV+S (includes optional storage upgrade); 30PVF (Floating, PV only); 30PVF + S (Floating, includes optional storage upgrade)

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