

Flexible and efficient residential solar solution

Conext™ RL single-phase grid-tie inverter

The Schneider Electric Conext RL inverters are specially designed to maximize yields for a wide range of residential rooftops.



Solution at a glance

Backed by Schneider Electric's global service infrastructure and expertise in energy management, the Conext RL series are the inverters you can trust for quality and reliability.

- **Productive:** maximize the use of your rooftop and gain greater energy production with dual MPPT inputs.
- **Flexible:** able to support unbalanced arrays and multiple roof orientations.
- **Connected:** monitor performance of your PV installation in a dashboard view with Conext Monitor 20 or an Ethernet card.
- **Reliable:** IP65 compliant, rugged, completely sealed unit to stand the harshest environmental conditions.
- **Easy:** compact unit with pluggable AC and DC connectors for easy and fast installation.
- **Versatile:** can be easily AC-coupled with Conext range of battery based inverter/chargers for retrofit grid-tie with backup as well as off-grid installations.

In an environment of ever-diminishing feed-in tariffs, monitoring PV installation performance is becoming increasingly important in order to maximize your ROI. You can choose either the local monitoring (Ethernet Card) or remote monitoring (Conext Monitor 20) options of Conext RL to fulfill this need.



Conext RL inverter can be coupled with **Conext ComBox** to enable zero export applications in regions with no incentives to sell PV energy to the grid.

Technical Specifications

Conext RL

Device short name	RL 3000 E	RL 4000 E	RL 5000 E
Electrical specifications			
Input (DC)			
MPPT voltage range, full power	160 - 500 V	180 - 500 V	180 - 500 V
Operating voltage range	90 - 550 V	90 - 550 V	90 - 550 V
Starting voltage	100 V	100 V	100 V
Max. input voltage, open circuit	550 V	550 V	550 V
Number of MPPT	2	2	2
Max. input current per MPPT	10 A	12 A	18 A
Max. short circuit current per MPPT	13.9 A	16.7 A	25.0 A
Nominal input power	3.2 kW	4.2 kW	5.3 kW
Max. DC input power per MPPT	3.2 kW	3.2 kW	3.5 kW
DC connection type	MC4, 2 pairs (1+1)	MC4, 4 pairs (2+2)	MC4, 4 pairs (2+2)
DC switch	Integrated (optional)	Integrated (optional)	Integrated (optional)
Output (AC)			
Nominal output power	3 kVA	4 kVA*	5 kVA**
Nominal output voltage	230 V, single-phase	230 V, single-phase	230 V, single-phase
Isolation	Transformerless	Transformerless	Transformerless
AC voltage range	184 V - 276 V	184 V - 276 V	184 V - 276 V
Frequency	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz
Frequency range	50 / 60 Hz +/- 5 Hz	50 / 60 Hz +/- 5 Hz	50 / 60 Hz +/- 5 Hz
Max. output current	13.9 A	18.2 A***	23.2 A
Total harmonic distortion	<3 %	<3 %	<3 %
Power factor (adjustable)	0.8 lead to 0.8 lag	0.8 lead to 0.8 lag	0.8 lead to 0.8 lag
AC connection type	IP67 connector	IP67 connector	IP67 connector
Efficiency			
Peak	97.5%	97.5%	97.5%
European	97.0%	97.0%	97.0%
General specifications			
Power consumption, night time	<1 W	<1 W	<1 W
IP degree of protection	IP65 (electronics and balance)	IP65 (electronics and balance)	IP65 (electronics and balance)
Climatic category (per IEC 60721-3-4)	4K4H	4K4H	4K4H
Cooling	Natural convection	Natural convection	Natural convection
Enclosure material	Aluminium	Aluminium	Aluminium
Product weight	20.0 kg (44.1 lb)	21.0 kg (46.3 lb)	24.0 kg (52.9 lb)
Shipping weight	25.0 kg (55.1 lb)	25.0 kg (55.1 lb)	30.0 kg (66.1 lb)
Product dimensions (H x W x D)	42.0 x 48.0 x 16.0 cm (16.5 x 18.9 x 6.3 in)	42.0 x 48.0 x 16.0 cm (16.5 x 18.9 x 6.3 in)	44.5 x 51.0 x 17.7 cm (17.5 x 20.1 x 7.0 in)
Shipping dimensions (H x W x D)	50.5 x 59.5 x 29.5 cm (19.9 x 23.4 x 11.6 in)	50.5 x 59.5 x 29.5 cm (19.9 x 23.4 x 11.6 in)	56.6 x 61.9 x 33.1 cm (22.3 x 24.4 x 13.0 in)
Ambient air temperature for operation	-20 to 65°C (-4°F to 149°F)****	-20 to 65°C (-4°F to 149°F)****	-20 to 65°C (-4°F to 149°F)****
Operating altitude	Up to 2000 m	Up to 2000 m	Up to 2000 m
Relative humidity	4 - 100% condensing	4 - 100% condensing	4 - 100% condensing
Noise emission (at 1 m distance)	<40 dbA	<40 dbA	<40 dbA
Features and options			
Embedded data logger	365 days		
Display	LCD 2 -line 16 digits, 2 Buttons		
Communication interface standard/optional	RS 485, MODBUS / Ethernet (with built-in web server)		
Multifunction relay	Yes		
Warranty in years standard/optional	5 / 10		
Regulatory approvals			
Electrical safety	CE marked for the Low Voltage Directive 2006/95/EC EN / IEC 62109-1 EN / IEC 62109-2, AS3100/AS5033		
Grid interconnection	VDE-AR-N 4105, RD1699, CEI 0-21, UTE C15-712-1, AS4777, VDE 0126, IEC 62116,IEC 61727, MEA, PEA, IEC 61683,G83/2 for Conext RL 3000E and 4000E, G59/2 for Conext RL 5000E, C10/C11 ed. 06.2012		
Environmental	RoHS, REACH, IEC 60068-2 (as per MNRE Technical Specifications)		
EMC	CE marked for the EMC directive 2004-108-EC Emissions: EN 61000-6-3 (residential) Immunity: EN 61000-6-2 (industrial)		
Available product variants			
Standard	PVSNVC3000 (RL 3000 E)	PVSNVC4000 (RL 4000 E)	PVSNVC5000 (RL 5000 E)
With integrated DC switch	PVSNVC3000S (RL 3000 E-S)	PVSNVC4000S (RL 4000 E-S)	PVSNVC5000S (RL 5000 E-S)

Specifications are subject to change without notice. *3.68 kVA for UK. **4.6 kVA for Germany. 4.95kVA for Queensland. *** 16A for UK. ****-20°C cold start temperature.