

Conext™ RL Single Phase Grid Tie Inverter

> Flexible and Efficient Residential Solar Solution

The Schneider Electric Conext RL Inverters are specially designed to maximize yields for a wide range of rooftops of detached houses and multiple dwellings. The rich MPPT features, high energy efficiency, partial shading algorithm and a wide temperature and voltage operating range enable you to maximize your ROI. Backed by Schneider Electric's global service infrastructure and its expertise in energy management, the Conext RL series are the inverters you can trust for quality and reliability. The product line is available in power levels of 3kVA, 4kVA and 5kVA.



Why Select Conext RL?



Higher Return on **Investment**

- Broad MPPT range of 160V-500V to help maximize your energy production
- Best in class conversion efficiency: 97.5% Peak Efficiency
- Shade tolerant MPPT algorithm designed to minimize the effect of partial shading on the energy output
- A broad unit operating range to extend your solar day by harvesting energy even in early mornings and late afternoons
- Supports a wide variation in grid voltage



Flexible

- Can be installed on different roof orientations
- Ability to support unbalanced arrays



Easy to **Install**

- Easy mounting bracket system
- MC4 DC and IP67 AC Connectors included



Easy to **Service**

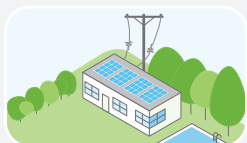
- Natural convection cooling for low maintenance and increased uptime
- Integrated DC Disconnect



Design for **Reliability**

- IP65 compliant rugged, completely sealed unit to stand the harshest environmental conditions
- Conext RL inverters undergo rigorous Multiple Environmental Over Stress Testing (MEOST)

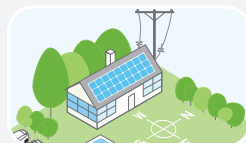
Product Applications



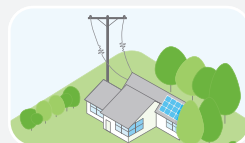
Residential Solar with Flat Roofs



Residential Solar with Multiple Pitched Roofs



Residential Solar with Different Orientation Roofs (East-West)



Residential Solar with Partial Shading



Residential Solar with Odd Number of Modules

Device short name	RL3000 E	RL4000 E	RL5000 E*
Electrical specifications			
Input (DC)			
Max. input voltage, open circuit	550 V	550 V	550 V
Start-up DC input voltage	100 V	100 V	100 V
Unit operating range, MPPT	100 V to 530 V	100 V to 530 V	100 V to 530 V
Unit operating MPPT range (full power)	160 V to 500 V	180 V to 500 V	180 V to 500 V
Rated DC input power	3150 W	4200 W	5250 W
DC power limitation	Linear derating of power from 500 V to 530 V	Linear derating of power from 500 V to 530 V	Linear derating of power from 500 V to 530 V
# MPPT	2	2	2
DC connector	MC4, 2 pairs	MC4, 4 pairs (2 + 2)	MC4, 4 pairs (2 + 2)
Max. DC input power for each MPPT channel	2000 W	2880 W	3510 W
Max. DC input current per channel	10 A	12 A	18 A
Output (AC)			
Nominal output power	3000 W / 3000 VA	4000 W / 4000 VA	5000 W / 5000 VA
Nominal AC voltage	230 V	230 V	230 V
AC voltage range	184 V to 276 V	184 V to 276 V	184 V to 276 V
Frequency range	50 / 60 Hz +/- 5 Hz	50 / 60 Hz +/- 5 Hz	50 / 60 Hz +/- 5 Hz
Reactive power	0.8 ind. to 0.8 cap.	0.8 ind. to 0.8 cap.	0.8 ind. to 0.8 cap.
Max. output current	13.9 A	18.6 A	23.2 A
Power factor	>0.99 at full load	>0.99 at full load	>0.99 at full load
Isolation	TL	TL	TL
Current harmonic	<3% THD total	<3% THD total	<3% THD total
AC connector	IP67 connector	IP67 connector	IP67 connector
Protection Features			
Reverse polarity protection	Yes	Yes	Yes
Input over voltage for each MPPT-varistor	2 for each input, class II	2 for each input, class II	2 for each input, class II
PV array insulation control	According to local standards	According to local standards	According to local standards
DC switch	Integrated	Integrated	Integrated
DC switch rating for each MPPT	25 A / 600 V	25 A / 600 V	25 A / 600 V
Anti-islanding	As per local standards	As per local standards	As per local standards
Output overvoltage-varistor	2	2	2
Efficiency			
Efficiency peak / Efficiency EU	97.5% / 97.0%	97.5% / 97.0%	97.5% / 97.0%
General specifications			
Weight	20 kg	21 kg	21kg
Dimensions (H x W x D)	41.0 x 47.3 x 15.5 cm (16.1 x 18.6 x 6.1 in)	41.0 x 47.3 x 15.5 cm (16.1 x 18.6 x 6.1 in)	44.5 x 51.0 x 17.7 cm (17.5 x 20.1 x 7.0 in)
Housing / Mounting system	Aluminium cast / Wall bracket	Aluminium cast / Wall bracket	Aluminium cast / Wall bracket
IP rating	IP65	IP65	IP65
Cooling	Natural Convection	Natural Convection	Natural Convection
Humidity	100% condensing	100% condensing	100% condensing
Operating temperature range	-25°C to 65°C: Still Air Condition	-25°C to 65°C: Still Air Condition	-25°C to 65°C: Still Air Condition
Temperature derating	At 50 °C with nominal PV voltage (AC 230Vac)	At 50 °C with nominal PV voltage (AC 230Vac)	At 50 °C with nominal PV voltage (AC 230Vac)
Altitude	2000m	2000m	2000m
Noise	<40db (A) at 1m	<40db (A) at 1m	<40db (A) at 1m
Communication interface standard / optional	RS 485, MODBUS / Ethernet and Wifi (with built-in webserver)	RS 485, MODBUS / Ethernet and Wifi (with built-in webserver)	RS 485, MODBUS / Ethernet and Wifi (with built-in webserver)
Display	LCD 2 -line 16 digits, 2 Buttons		
Remote firmware upgrades	Yes	Yes	Yes
Multifunction relay	Yes	Yes	Yes
Warranty in years standard / optional	5 / 10	5 / 10	5 / 10
Regulatory approvals			
Product certifications	VDE-AR-N 4105, RD1699, CEI 0-21, G59/2, G83/1, UTE C15-712-1, AS4777, VDE 0126, EN50438		
Product Safety	IEC 62109-1, IEC 62109-2, AS3100/AS5033		
CE	LVD: 2006/95/EC, EMC: 2004/108/EC		
EMC	IEC 61000-6-2, IEC 61000-6-3, R&TTE		
RoHS / REACH compliance	RoHS, REACH, WEEE and 4k4h compliant		

Specifications are subject to change without notice. *4.6 kW for Germany