# Conext<sup>™</sup> RL Ethernet card

www.schneider-electric.com



Device for Photovoltaic Inverter Monitoring and Control

## A Introduction

Conext RL Ethernet card is an add-on accessory for the Conext RL series of PV inverters. This card extends the monitoring capability of Conext RL Inverters by providing the user with a rich graphical webpage interface. The card has both 10/100 Mbps Ethernet connection and standard RS485-Modbus interface.

# **A**DANGER

### HAZARD OF ELECTRIC SHOCK AND FIRE

- All the wiring must be done by qualified personnel to ensure compliance with all applicable installation codes and regulations.
- · For use only with Conext RL series PV Inverters.
- Suitable only for connection to Class 2, energy limited, separated extra-low voltage circuits (SELV).
- Follow the installation and safety instructions in the Conext RL Installation and **Operation Manual.**
- Do not disassemble.
- Disconnect all the sources of energy before adding or removing the communication module or the Ethernet card.

## Failure to follow these instructions will result in death or serious injury.

### Exclusion for Documentation

JNLESS SPECIFICALLY AGREED TO IN WRITING. SELLEF

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### **Contact Information**

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Please contact your local Schneider Electric Sales Representative or visit the Schneider Electric website at: http://www.schneider-electric.com/sites/corporate/en/support/operations/local-operations/local-operations.page

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B Material List			
Item	Quantity	Description	
Conext RL Ethernet card	1	Ethernet card for local monitoring	
Quick start guide	1	Instructions for installing the Conext RL Ethernet card	
Set of screws	1	Two M3.5 Philips pan-head captive screws (attached to card)	
Cable gland 1		MG25A M26x1.5 (attached to card)	
C Important Physical Features			



1 10/100 Mbps Ethernet port 2 RS485 port (dual port) 3 Screw terminal 4 Cable gland 5 Termination resistor

- following steps.

4. If an RS485 connection already exists, unplug and disconnect the RS485 connection from the existing Conext RL Communication module card.



- 6. Direct connection to computer

  - of Ethernet port).



## D

### Web browsers:

- Windows Internet Explorer 9.x or later
- Firefox 22.x or later
- Google Chrome 22 or later (recommended)
- Safari 5.1.7 or later
- **Pre-requisites**

## E Installation of Conext RL Ethernet card

1. De-energize the inverter. If possible follow the lock-out tag-out procedure. 2. Wait at least five minutes for internal voltages to discharge before doing any of the

Note: The module contains static-sensitive circuits, follow suitable handling precautions. 3. Remove the existing communication module from the Conext RL expansion socket. (For detailed instructions, refer to the "Removing the Communication Module" section in the Conext RL Installation and Operation Manual).

5. Depending on the local network, follow step 6 (Direct connection to computer) or step 7 (Connection through a network switch or router)

1. Connect one end of a CAT5 Ethernet cable to the 10/100 Mbps Ethernet port on the Conext RL Ethernet card (Refer to the figure under Section C for the location

2. Connect the other end of the Ethernet cable to the laptop or PC.

Note: • An old PC or laptop may require an Ethernet cross over cable.

• The default IP address is: 169.254.1.100.

• Do not connect the Ethernet cable to the Modbus RS485 port, to avoid potential damage to the Ethernet card.

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## E Installation of Conext RL Ethernet card (continued)

### OR

- Connection through a network switch or router.
- 1. Connect one end of the CAT 5 Ethernet Cable to the RJ45 Ethernet port on the Conext RL Ethernet card.
- 2. Connect the other end of the CAT5 Ethernet cable to the network router Ethernet port.

Note: Do not connect the CAT5 Ethernet cable to the MODEM/ WAN port on the router.



- 8. If required, reconnect the RS485 Modbus cables to RS485 Modbus ports. Refer to the figure under section C for RS485 port locations. (For detailed instructions on connecting cables, refer to the "Connecting Cables to the Communication Module" section in the Conext RL Installation and Operation Manual). Note: Do not connect the Modbus cable to the Ethernet port.
- 9. Insert the Conext RL Ethernet card into the Conext RL Communication module expansion slot and secure the card by tightening the two captive screws on both sides.
- 10. Energize the inverter by connecting all the AC and DC sources that power the system and wait for the inverter to power-up.
- 11. Wait for around 60 seconds and navigate to the IP address option on the LCD display. (Refer to the "Communication Settings" option in the Conext RL Installation and Operation Manual for viewing the Ethernet IP address).
- 12. Open a web browser on your laptop or tablet and type the IP address displayed on the LCD display. The Conext RL login webpage will be loaded and displayed by the web browser.

F Access	sing the webpage	F Accessing the	e webpage (continued)
<ol> <li>Select the p</li> <li>Login with</li> <li>The defau</li> <li>The defau</li> </ol>	preferred language. the username and password. It username is <i>Owner.</i> It password is <i>ConextRL</i> .	The Settings screen 4.Select the Ethernet	is displayed as shown below. tab.
B Login	Language:  Language: User Name: User Name: Password: Remember me on this computer Login	Inverter - Advanced Ethernet Ethernet	Time       PVInformation         Exrol       Obtain IP Address         Display       Display         Display       Display         Budnet Mask       262-525-0         OddawryP       10179224         Display       Display         Display       1017922-00         BadewryP       1017922-00         Display       1017922-00     <
	Sehneiden	G Specification	S
Copyright 🖾 🤉	2013 Schneider Electric, Inc. All Rights Reserved.	Communication interfa	aces
		Ethernet	<ul> <li>Connector: 1 x RJ45, 10/100 Mbps (auto-negotiation)</li> <li>DHCP / SNTP / DNS / NBNS / HTTP</li> </ul>
On success	sful login, the Conext RL dashboard is displayed as shown below:	RS485	<ul> <li>Connector: 2 x RJ45</li> <li>Modbus slave: 2 Wire Serial</li> <li>Speed: 9600 bps</li> </ul>
Microong	Settings Tab R Settings	General specifications	5
Overview Details	Power 33 Today 19 EUR Dashboard 3555 EUR	Weight	115 g (0.25 lbs)
	Image: Constraint of the second sec	Dimensions (H x W x	D) 64 mm x 80 mm x 122 mm (2.52 in x 3.15 mm x 4.8 in)
Navigation Tab	Uniter Power % of Rated Power Warning Error Fault	Power consumption	1.5 Watt maximum
	35         Total         00000011185         kWh         Actual Cos Phi Max Power         1.60           Max Power         3.00         kW	Interface	Golden finger 24 pins
	History Daily Monthly Yearly	Operating temperatur	e -20° C to 85° C (-4° F to 185 ° F)
	1.00 1000 EnergyWh 0 1200 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 100 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1	Storage temperature	-20 ° C to 85° C (-4° F to 185 ° F)
		Operating humidity	0 - 90 % Non-condensing
3.To view and	l edit the network settings, click on the Settings tab.	Features	

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## Conext RL Ethernet card PVSCMC1105

				Owner   Logout 07.01.2013 @11.10.AM
				(A) Letters
net	Time	FW Information		
rent Status	(MAC : 00.18	23.1b.0e.08)		
	12	Ottain IP Address IP Address Subnet Mask Gateway IP DNS 1 DNS 2 Search Domain	Enable 10.179 29.04 255 255 255 0 10.179 20.1 10.179 20.1 10.179 10.136 10.179 51 20 apa gad schneider-electic.com	
ernet				
		DHCP Client	C Enable C Disable	
		IP Address	69.254.1.100	
		Subnet Mask	255 255 255 0	
		Gateway IP	0000	
		DNS 7	b000	
		Search Domain		
t Name				
		Host Name	Schneider	
				Signat

User Interface

Warranty

Integrated Web Server (Internet Browser)
Two years