

WLAN for CompactRIO™



SEA cRIO xLAN modules offer wireless access to National Instruments™ CompactRIO™ systems for remote control or data transfer by WLAN via WLAN/WiFi and Ethernet access.

- cRIO WLAN - WLAN/Wi-Fi access to the CompactRIO controller
- cRIO SWITCH - Ethernet support to CompactRIO for two additional external devices



Modules	cRIO WLAN	cRIO xLAN SWITCH
Order no.	6000009	6000011
Functionality		
Switch function supported / # of ports	• / 2 (3)	• / 2 (3)
WLAN function supported	•	-
Sleep mode	•	•
Network mode	Bridging	Switching
Frequency range	2.412-2.484 GHz	-
Range	up to 100 feet indoors	-
Data rate WLAN/802.11 b/g	up to 54 Mbit/s	-
Data rate network	10/100 Mbit/s	10/100 Mbit/s
Technical Data		
Operating temperature range [deg C]	-40 to 60	-40 to 60
Operating voltage [V] (front power connector)	7-30	7-30
Current Consumption [mA] mean at 12V (typical value)	290	115
Current Consumption [mA] peak at 12V	350	125
Operating voltage [V] (backplane)	5	5
Operation current [mA] mean (backplane)	6	6
Size [mm]	80 x 23 x 88	
Weight [g]	205	175
Software		
Configuration Software	•	•
Supported LabVIEW versions	8.x, 9.x	n.a.
Firmware flashable	Factory only	

• = included; - = not available

Subject to technical changes.



cRIO WLAN/WiFi and Switching Modules

from S.E.A. Datentechnik GmbH offer solutions for comfortable measurement and supervision applications. In addition to the GPS and GSM modules now WLAN/WiFi modules with switching function are available for the CompactRIO™ platform, the SEA cRIO xLAN modules.

The National Instruments CompactRIO™ platform for measurement and control applications bases on FPGA technology. It allows reliable real time data acquisition and control solutions. Various digital and analog sensor signals and bus systems are supported.

Combined with the cRIO xLAN modules this offers an attractive wireless solution. The complete functionality of the CompactRIO controller like programming, starting programs or transmission and reception of TCP/IP data or firmware update is provided by Ethernet.

There are two module types available:

- cRIO WLAN/WiFi module
- cRIO xLAN Switching module.

Service

S.E.A. Datentechnik GmbH develops soft- and hardware for the CompactRIO platform and supplies customized control and measurement systems. Also we offer OEM solutions and integration support with CompactRIO products.

For further information please visit:

www.sea-gmbh.com/crio



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Switch Function

allows to connect additional Ethernet devices to a CompactRIO system

- three port switch with 10/100 Mbit/s capabilities
- two free additional Ethernet ports for connecting two additional external LAN devices

WLAN Function

- wireless data acquisition and system control
- wireless security with IEEE 802.11.i
- secure data transmission by AES: WPA – PSK
- TKIP Encryption
- 64/128-bit WEP
- FCC class-B and EN EMC safety compliant
- the following protocols are supported: ARP, UDP, TCP, Telnet, ICMP, SNMP, DHCP, HTTP, SMTP
- supports Ethernet-to-wireless bridging for an CompactRIO controller

Accessories

- WLAN mini antenna
- Power cable
- Twisted pair bridge cable
- LabVIEW Driver software
- Documentation