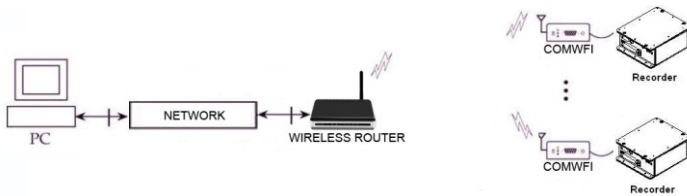


**Features**

- Wi-Fi communication (802.11b) for ISAAC Instruments Recorder
- Strong encryption WPAWEP (64/128-bit)
- Low power consumption
- Small size and light weight
- FCC et IC certified

**Description**

The COMWFI is used to wirelessly transmit data from an ISAAC Instruments Recorder to a PC via a Wi-Fi network (802.11b).



Once it is switched on, the ISAAC Instruments Recorder automatically connects to the ISAAC Instruments Communication Service, installed on a PC over the network.

The COMWFI can be used with the following antennas:

Part Number	Description
WRLAN4-111	Antenna to be fixed on the roof of the vehicle. 4 bands for Wi-Fi, GPS and Cellular (850/1900 MHz)
WRLAN4-110	Antenna to be fixed on the roof of the vehicle. 2 bands for Wi-Fi and GPS

Note: Antenna may differ from the picture, shown in this datasheet.

**Description of the LED status:**

LED status	Description
OFF	No power
Green	Powered but NOT connected to the network
Green-Orange Fast blinking	Searching for the network
Orange	Connected to the network
Orange-Red Blinking	Transferring data

**Installation**

**Setup:**

- Plug the antenna to the RPSMA connector of the COMWFI.
- Connect the COMWFI to one of the Recorder COM port (COM1, COM2 or COM3)
- Route the cable at least 20cm (8") away from high interference electrical devices, such as: ignition coils, plug leads, high-current leads, high emission electronic modules or antennas

**Software configuration:**

**COM Port Activity:** COMWFI - Wi-Fi module.

**IP address :** The IP address of the PC on which the ISAAC Instruments Communication Service is installed.

**TCP Port :** The TCP port of ISAAC Instruments Communication Service.

Specifications

Description	Symbol	Min.	Typ.	Max.	Unit
Power requirements					
Power supply voltage	$V_{in}$	9	12	30	V
Current (idle)	$I_{idle}$		67		mA
Current (transmission)	$I_{tx}$		113		mA
Network interface					
Serial transfer speed	$S_{ser}$			115	Kbps
Receive sensitivity @ 11Mbps	$S_{rx}$		-82		dBm
Transmit power	$P_{tx}$		16		dBm
Frequency	F		2.4		GHz
Modulation	M	CCK (11/5 Mbps), DQPSK (2 Mbps), DBPSK (1 Mbps)			
Standard	Std	IEEE 802.11b			
Wireless security		64/128-bit encryption (RC4) 128-bit TKIP/CCMP encryption 802.1x EAP authentication Enterprise and Pre-Shared Key (PSK) mode			
WEP					
WPA/WPA2/802.11i					
Antenna		RPSMA			
Connector	Con	50			Ohm
Impedance	Imp				
Certifications		FCC Part 15 class B Industry Canada			
FCC	FCC				
IC	IC				
Environment					
Operating temperature	$T_{Oper}$	-40 (-40)		85 (185)	°C (F)
Humidity	H	5% à 95% non-condensing			
Mechanical properties					
Height	H	30 (1.18)			mm (in)
Width	W	64 (2.52)			mm (in)
Depth	D	88 (3.46)			mm (in)