

## XC900M USER GUIDE

**MODEL : XC900M**

**BRAND : XAGYL**

The **XC900M** 1000mW TX power OFDM miniPCI radio module, designed for the Frequency band 902 MHz ~ 928 Mhz to support high value applications. With higher TX Power, better RX sensitivity and high SNR , the **XC900M** is specially designed to deliver best performance in long range outdoor applications. The robust design along with lower power consumption and enhanced resilience to RF surges and ESD makes it ideal for deploying in harsh environments.

### Applications

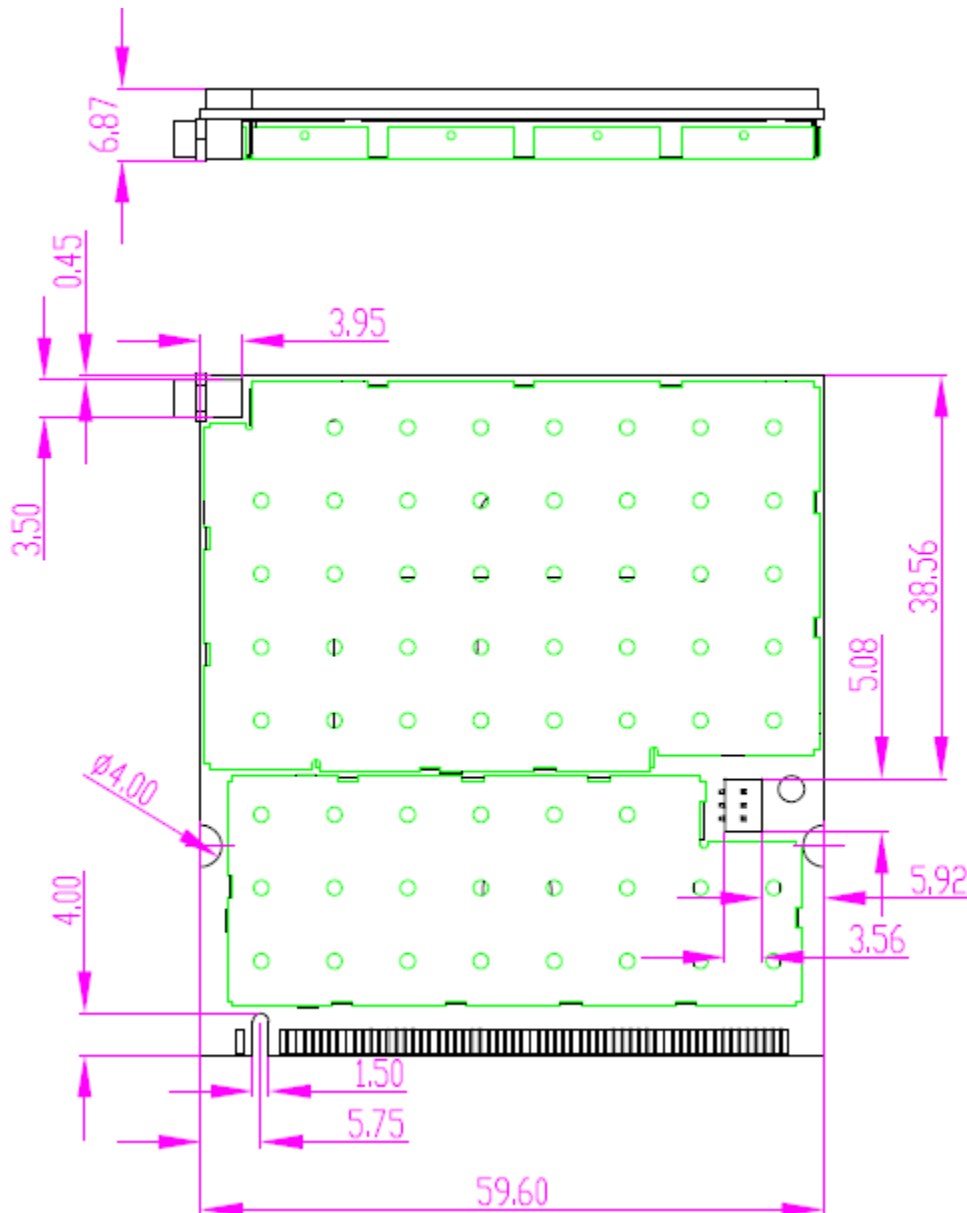
- Long range outdoor broadband wireless applications
- Backhauls
- Access points and high performance CPEs
- Mesh wireless infrastructure applications
- Industrial applications

### Key Features

- High power 30dBm (1000mW)
- One MMCX connector to maximize transmit power at higher modulation schemes and overall receiver sensitivity
- Accurate power control 0dBm to 30dBm range
- Enhanced ESD Performance
- Supported by open source Mad WiFi Linux kernel drivers for industrial and outdoor broadband wireless communications systems
- Windows 2000/XP/Vista drivers offers easy integration into Industrial PCs

RADIO MODULE SYSTEM INFORMATION	
Model No	XC900M
Interface	32bits, 33MHz miniPCI Type III A
Operation Voltage	3.3V
Radio Frequency Band	902 MHz ~ 928 MHz
Data Rates	54, 48, 36, 24, 18, 12, 9, 6 Mbps (Auto fall back) 11g 1,2,5.5Mbps,11Mbps (Auto fall back) 11b
Channel Band width	5/10/20 MHz
Driver	Linux MadWiFi, Windows XP, Windows 2000

PHYSICAL, ENVIRONMENTAL AND OTHER SPECIFICATIONS	
Antenna Ports	Single MMCX Port
Dimension & Weight	2.36" x 2.56" (60 x 65 mm), 36 g

**Mechanical Dimensions (mm)****Installation Guide**

Shut down Power of the embedded system in which the radio module is integrated.

Insert the Radio module into the Mini PCI socket and ensure that it is secured well in the socket.

Connect the antenna to the MMCX connector through a pig tail

Apply Power to the system

**Federal Communication Commission Interference Statement**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a

residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### **FCC Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

#### **This device is intended only for OEM integrators under the following conditions:**

- The antenna must be installed such that 20 cm is maintained between the antenna and users, and
- The transmitter module may not be co-located with any other transmitter or antenna,

#### **IMPORTANT NOTE:**

In the event that these conditions cannot be met (for example certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID can not be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization.

#### **End Product Labeling**

This transmitter module is authorized only for use in device where the antenna may be installed such that 20 cm may be maintained between the antenna and users.

The final end product must be labeled in a visible area with the following:

“Contains FCC ID: BQO-XC900M and IC ID : 7503B-XC900M”

#### **IC Interference statement**

This device complies with RSS-210 of the IC Rules. Operation is subject to the following conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation. IC: 7503B-XC900M.

Modular with multiple Antennas

This radio transmitter (IC: 7503B-XC900M, FCCID: BQO-XC900M) has been approved by Industry Canada and FCC to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Ant type: Omni Directional, Ant gain: 5.5 dBi, Ant impedance: 50 ohm

Selon les demieres RSS-210 et CNR-GEN

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de license.

L'exploitation est autorisee aux deux conditions suivantes :

1. L'appareil ne doit pas produire de brouillage, et

2. L'utilisateur de L'appareil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d'en compromettre le fonctionnement.