MCS-WIRELESS MODEM

Rev. 2.1 - 2020-03-26

MCS-WIRELESS Setup
with Antenna Booster

Package contains the parts shown below:

Dual Band - 800-1900 MHz Mini Magnet Mount Antenna with SMA Male Connector and 12.5-Foot RG174 Coax

Ethernet Cross Over Cable supplied

MCS Total Solution for all your Control Needs

RoHS Compliant

Energy Efficient and RoHS Compliant

Revision/Disclaimer Page

Date	Author	Description of Changes
1/6/15	DEW	Setup Manual
1/8/15	DEW	Added wiring diagram
11-16-15	DEW	Make corrections to 4g and photos
1-27-16	DEW	Revisions
8-5-19	DEW	Revisions - new Cradlepoint
9-23-19	DEW	Add drawing spec for mounting

The MCS Commitment is to provide practical solutions for the industries needs and to be both a leader and partner in the effective use of microprocessor controls.

Micro Control Systems, Inc.
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Fort Myers, Florida 33905
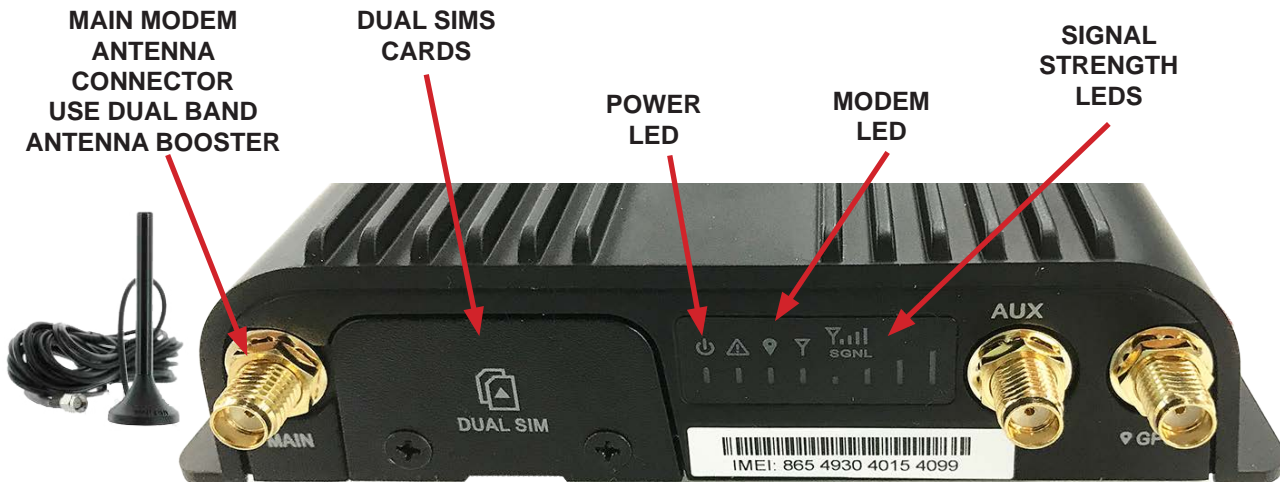PH:(239) 694-0089   FAX:(239) 694-0031
www.mcscontrols.com

Table of Contents

Antennas are supplied with Wireless Modem. MCS recommends using the supplied Dual Band Antenna Booster as shown

Ethernet Cross Over Cable supplied

Dual Band Antenna Booster supplied by MCS

MCS-Wireless Modem

Power Cord

Chapter - 1.   MCS-WIRELESS-MODEM INTERFACE

MAIN MODEM ANTENNA CONNECTOR USE DUAL BAND ANTENNA BOOSTER

DUAL SIMS CARDS

POWER LED

MODEM LED

SIGNAL STRENGTH LEDS

Modem Antennas: The **MCS-WIRELESS-MODEM** comes with a 'DUAL BAND -800-1900 MHz Mini Magnet Mount Antenna and is connected to the 'MAIN MODEM ANTENNA CONNECTOR.

- Green = Modem has established an active connection.
- Blinking Green = Modem is connecting.
- Amber = Modem is not active.
- Blinking Amber = Data connection error. No modem connection possible.
- Blinking Red = Modem is in the process of resetting.

POWER PLUG IN

RESET

USB PORT

COMPUTERS OR LOCAL DEVICES (LAN DEFAULT

ETHERNET DATA SOURCE (WAN DEFAULT

ETHERNET CONNECTIONS

4

Ø 4.23 ,4PLS

70.00

17.10

3.50

111.00
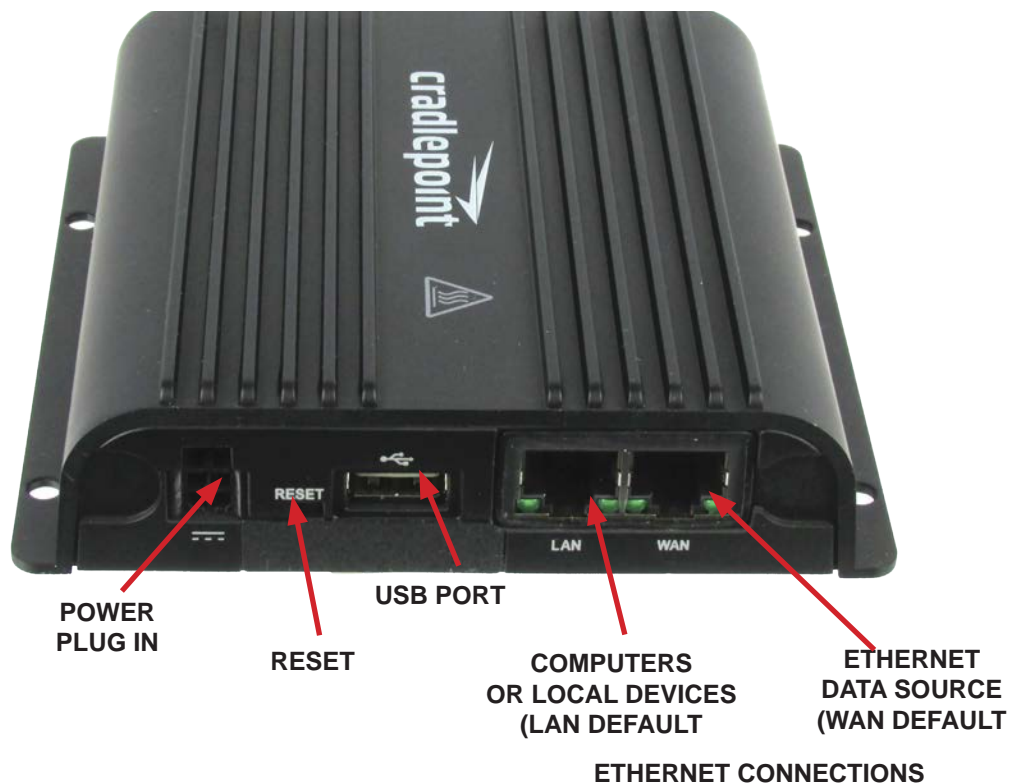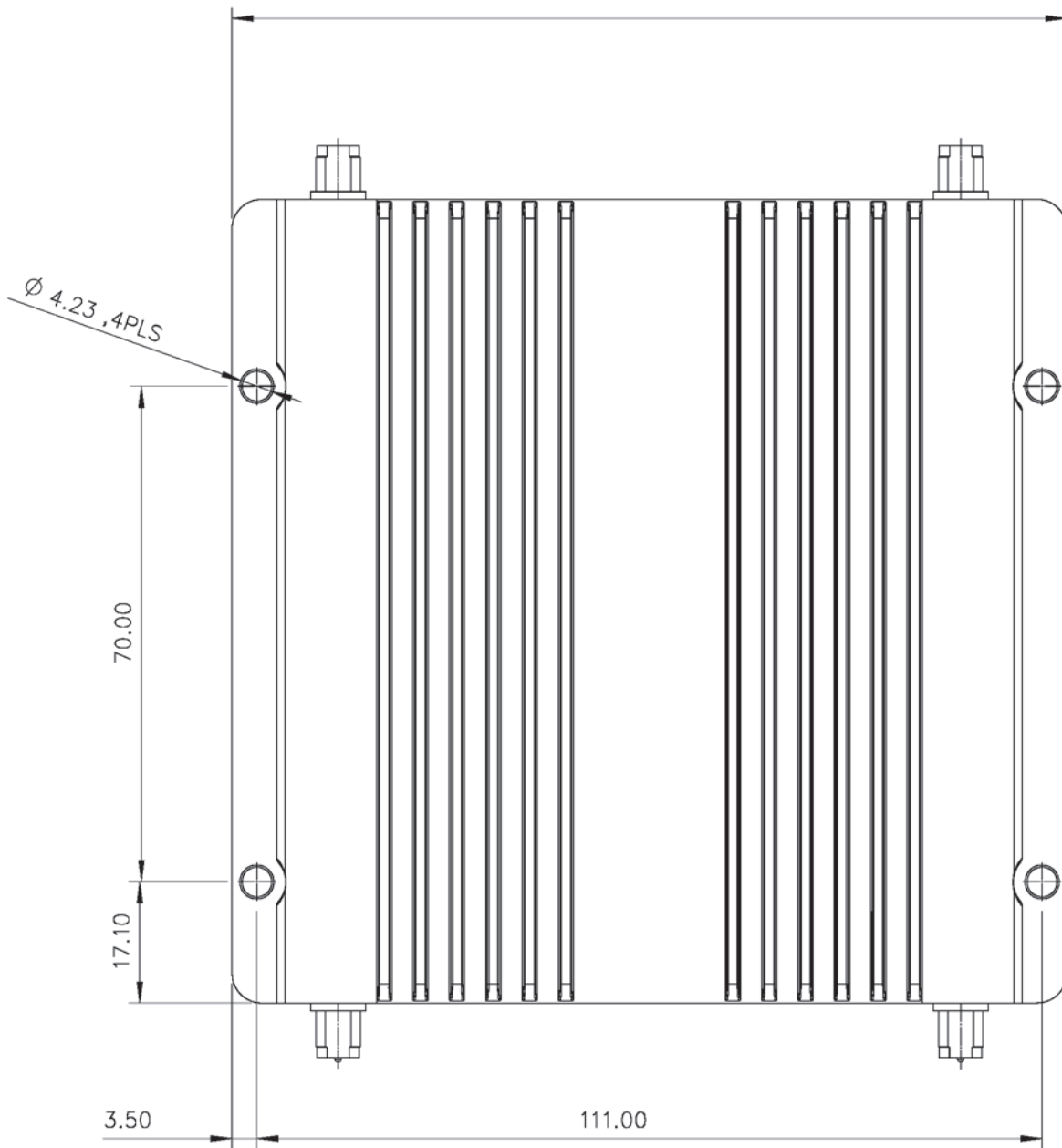
SIZE: 4.6 × 4.5 × 1.2 in (118 × 113.5 × 29.3 mm)

Chapter - 2.   QUICK START SETUP

2.1. DUAL BAND ANTENNA

MCS recommends using the DUAL BAND ANTENNA BOOSTER for better reception.

Attach the Dual Band Antenna, thumb tight only.

Main Antenna connection

2.2. CONNECT TO MCS-MAGNUM

Connect the Crossover orange cable from the MCS-WIRE-LESS MODEM to the ethernet port on the MAGNUM and the other end of the cable to the LAN port on the MCS-WIRE-LESS MODEM.

LAN PORT

ETHERNET PORT

Ethernet Cross Over Cable supplied

2.3. NETWORK ADDRESS ON MCS-MAGNUM

THE NETWORK ADDRESS FOR YOUR NEW MCS-WIRELESS-MODEM HAS BEEN FACTORY SET AND IS SUPPLIED WITH THE UNIT ON THE LABEL ON THE BOTTOM OF MODEM.

YOU MUST SET THE NETWORK ADDRESS ON YOUR CONTROLLER TO MATCH THIS FACTORY ADDRESS.

2.4. CONNECTING CROSSOVER CABLE

Connect the end of the supplied **CROSSOVER ETHERNET CABLE** to the **LAN DATA SOURCE** connector on the rear of the **MCS-WIRELESS-MODEM**, connect the other end to the **ETHERNET** port on the **MCS-MAGNUM CONTROLLER**.

2.5. POWER SUPPLY

Plug the power supply into an electrical outlet and connect it to the router.

Make sure the power is switched on.

O = OFF

I = ON

2.6. ACTIVATE YOUR MODEM

A wireless broadband data plan has been added to your **MCS-WIRELESS-MODEM** through Verizon Wireless. **THIS IS A FACTORY PRE-INSTALL.**

For more detailed installation, refer to APP112
MCS-WIRELESS MODEM with Antenna Booster Installation found on our web site.

If there are any problems or questions about the installation of the data plan, please consult MCS support at: **support@mcscontrols.com**

Chapter - 3.   MULTIPLE CONNECTIONS

3.1.   CONNECTING TO MULTIPLE MCS-MAGNUMS

This will enable you to communicate with MCS-MAGNUM anywhere in the Continental United States. You can connect multiple MCS-MAGNUMS to the MCS-WIRELESS-MODEM using an Ethernet Switch (not supplied). The MCS-WIRELESS-MODEM and all MCS-MAGNUMS must be connected to the same switch on the same network.

3.2.   ETHERNET SWITCH (NOT SUPPLIED)

An Ethernet switch (router), provides a central connection in an Ethernet network in which each connected device has its own dedicated link with full bandwidth. Switches divide LAN data into smaller, easier-to-manage segments, and receive data from the controller. As a result, every port on the switch represents a dedicated 10 or 100-Mbps pathway.
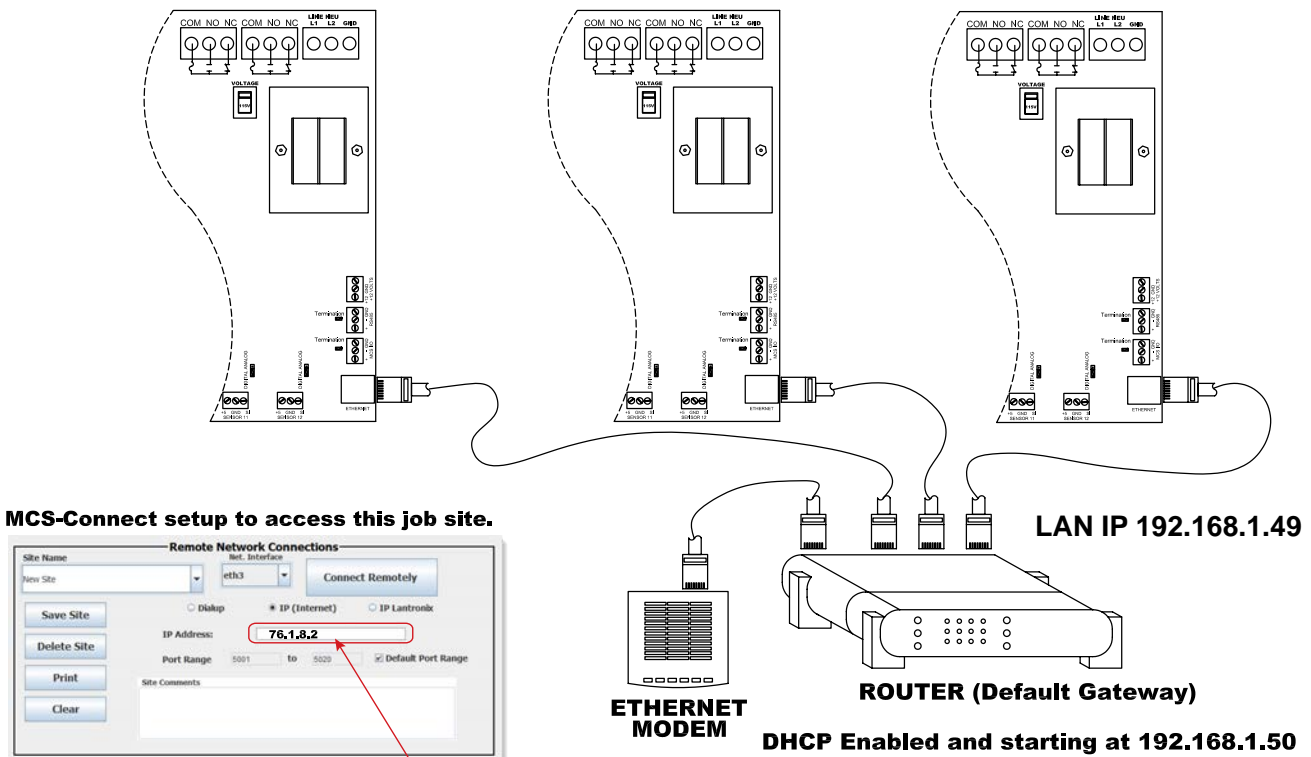
Users connected to an Ethernet switch (router) do not share bandwidth.

A switch offers relief from the network congestion, which a shared hub can cause.

MAGNUM #1
Static IP: 192.168.1.1
Subnet mask: 255.255.255.0
Default Gateway: 192.168.1.49
TCP/IP Port: 5001

MAGNUM #2
Static IP: 192.168.1.2
Subnet mask: 255.255.255.0
Default Gateway: 192.168.1.49
TCP/IP Port: 5002

MAGNUM #3
Static IP: 192.168.1.3
Subnet mask: 255.255.255.0
Default Gateway: 192.168.1.49
TCP/IP Port: 5003

MCS-Connect setup to access this job site.

LAN IP 192.168.1.49

Static IP address of your MCS-WIRELESS MODEM see label on back of unit shipped to you

ETHERNET MODEM

ROUTER (Default Gateway)

DHCP Enabled and starting at 192.168.1.50
Setup Port Forwarding:
      1. 5001 ➤ 192.168.1.1
      2. 5002 ➤ 192.168.1.2
      3. 5003 ➤ 192.168.1.3

Micro Control Systems, Inc.

Typical MCS Ethernet Connection