Honeywell | MIWI350 Power or Communications Box Quick Start Guide

Product Overview

The MIWI350 product is designed to replace the current Honeywell MiWireless platform with a more competitive, reliable and easy to use solution. The MIWI350 product line provides a comprehensive selection of communication hardware and power supply systems optimized to integrate with Mercury Instruments' precision measurement instrumentation. It also includes software for Remote Monitoring and Data Acquisition (RMADA), including alarm handling and notification.

The MIWI350 device includes:

- An inbuilt Electronic Volume Corrector or Electronic Recorder
- A built-in electronic cellular modem

Product Features

- CSA C/US Class 1, Division 2, Group C & D
- Compatible with MasterLink and PowerSpring software
- Available in Wall, Pipe, and Portable mounting options
- Internal or External Mounted Display
- Modem Power Control
- Optional Backup Battery for Uninterrupted EVC Functionality

Power Supply Options

- AC/DC Power Supply (Refer to FD-611) - *Future Release*
- Solar Power with rechargeable Sealed Lead-Acid Battery (Refer to FD-612)
- Battery - Alkaline Packs (Dual/Quad) (Refer to FD-613)

This quick-start guide covers the Power or Communications box variant only.

General Safety Precautions

- Lock the battery mount bracket flip cover properly after mounting the battery
- Close the door of the MIWI350 device properly
- Check the lock and latchet, and lock the MIWI350 device properly
- Check the padlock properly while locking the MIWI350 device

Safety and Hazardous Information

MIWI350 complies with the general safety standards and regulations. MIWI350 is approved for use in hazardous areas (Class I Division 2). Check the operating condition limits of MIWI350 before installing. You must be familiar with the currently applicable electrical installation standards and regulations before installing and operating MIWI350 in hazardous areas.

Warning: Denotes an explosion hazard. Ensure you follow all instructions described in the warning notification.

Caution: The caution warns you of possible damage to property and provides instructions to avoid damage to MIWI350.

For more information on MIWI350 user manual, refer FD-610.

Unpacking

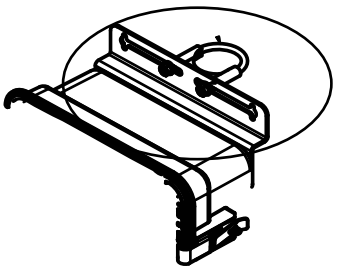
After you receive the MIWI350 device:

1. Remove the contents from the box and from the mounting kit bag.
2. Check the shipment against the invoice to ensure that the components ordered are installed in MIWI350.
3. Report any shortage or shipping damages to your nearest Honeywell Account Manager.

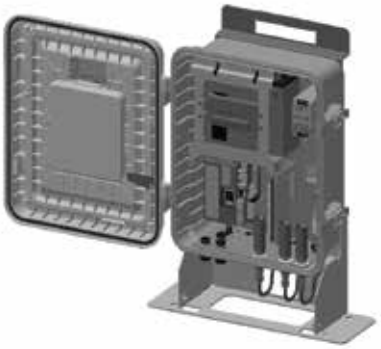
Instrument Mounting Options

Install the MIWI350 device using one of the following mounting options:

Wall Mount



Pipe Mount



Portable Mount

Opening and Closing the Door

01

Release the door latches of the device one at a time, and open the door of the device

02

Route the external power cable through the 05 gland and connect to power terminal block

06

Close the door of the device properly. Also, check the padlock, latchet, and lock the device.

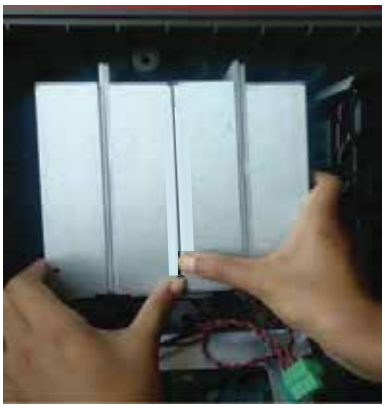
Installing the Dual / Quad Battery Packs

01

Quarter turn the screw and open the battery mount bracket flip cover (-cw)

Dual battery pack

(Or)



Quad battery pack

02

Insert the battery pack in the mount bracket through the guides of bracket and case

03

Close the battery mount flip cover and turn back the screw (+cw)

04

Connect the dual/quad battery cable to the alkaline battery power cable

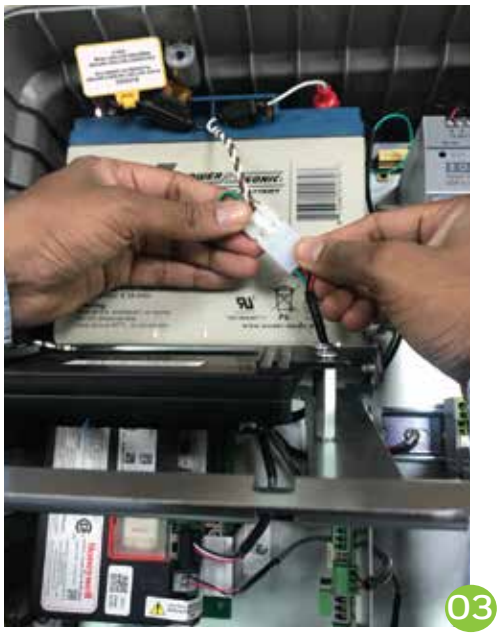
Connecting Solar Power and Lead-Acid Battery

For a fresh Lead-Acid Battery, the No Load Voltage is expected to be between 12.5–13.5VDC.

WARNING: Please perform the No Load Battery Voltage measurement in an area rendered Non Hazardous. Please exercise caution to ensure the Battery Terminals do not come in contact with any other metal objects during the measurement/handling.

01 Quarter turn the screw and open the battery mount bracket flip cover

02 Insert the battery in the mount bracket carefully



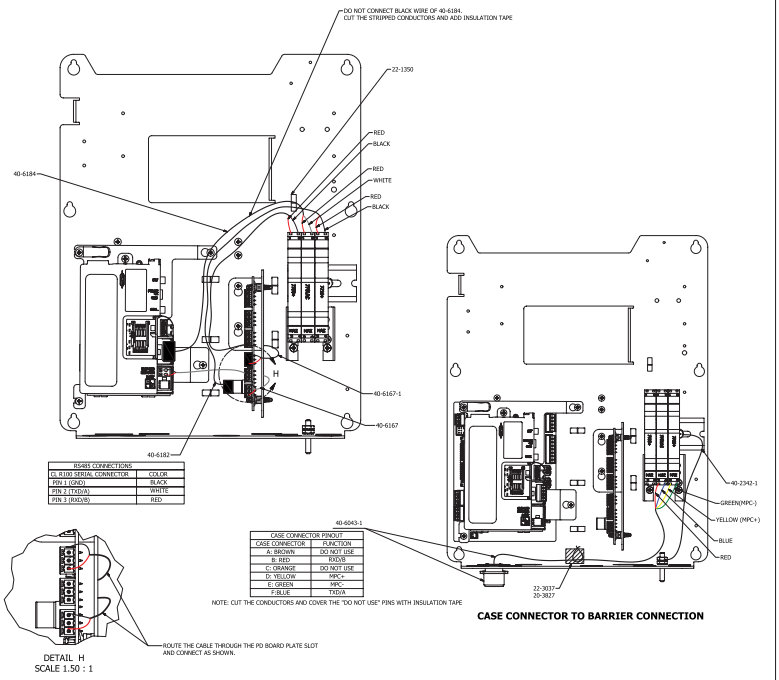
03 Connect the battery pack cable to battery charge controller cable

04 Close the battery mount flip cover and turn back the screw

05 Configure modem/EC/ERX350/HMI settings
(For more information, refer MIWI350 Installation and Operational Manual - FD-610)

POWER/COMMUNICATION BOX WIRING (WITH CLOUDLINK 4G MODEM)

Barrier Connections



RS485 CONNECTIONS	
CL R100 SERIAL CONNECTOR	COLOR
PIN 1 (GND)	BLACK
PIN 2 (TXD/A)	WHITE
PIN 3 (RXD/B)	RED

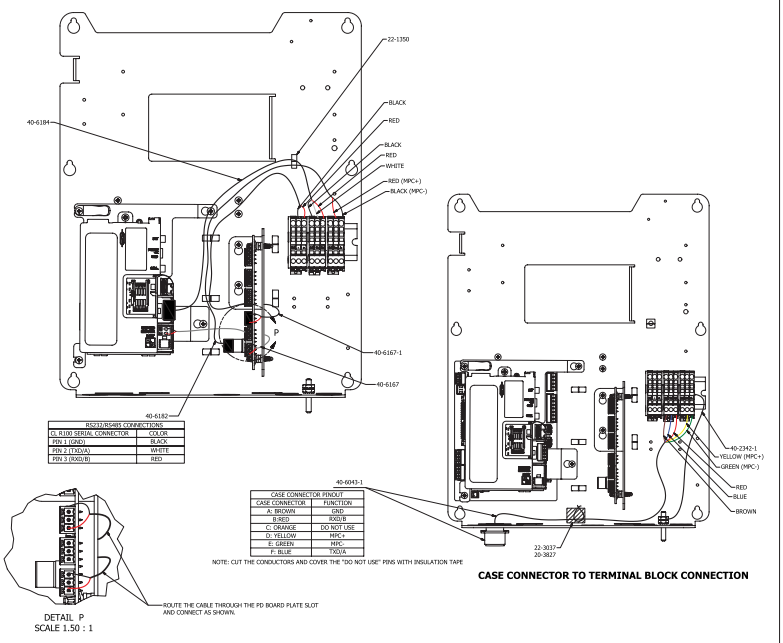
CASE CONNECTOR PINOUT	
CASE CONNECTOR	FUNCTION
A: BROWN	DO NOT USE
B: RED	RXD/B
C: ORANGE	DO NOT USE
D: YELLOW	MPC+
E: GREEN	MPC-
F:BLUE	TXD/A

NOTE: CUT THE CONDUCTORS AND COVER THE "DO NOT USE" PINS WITH INSULATION TAPE

DETAIL H
SCALE 1.50 : 1

CASE CONNECTOR TO BARRIER CONNECTION

Terminal Block Connections



RS232/RS485 CONNECTIONS	
CL R100 SERIAL CONNECTOR	COLOR
PIN 1 (GND)	BLACK
PIN 2 (TXD/A)	WHITE
PIN 3 (RXD/B)	RED

CASE CONNECTOR PINOUT	
CASE CONNECTOR	FUNCTION
A: BROWN	GND
B:RED	RXD/B
C: ORANGE	DO NOT USE
D: YELLOW	MPC+
E: GREEN	MPC-
F: BLUE	TXD/A

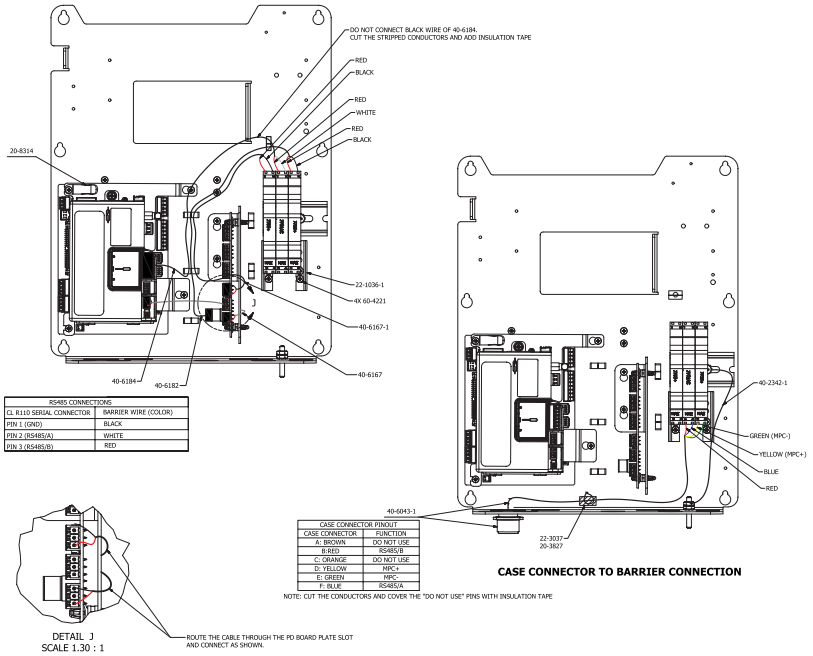
NOTE: CUT THE CONDUCTORS AND COVER THE "DO NOT USE" PINS WITH INSULATION TAPE

DETAIL P
SCALE 1.50 : 1

CASE CONNECTOR TO TERMINAL BLOCK CONNECTION

POWER/COMMUNICATION BOX WIRING (WITH CLOUDLINK 4G M1 MODEM)

Barrier Connections



RS485 CONNECTIONS	
CL R110 SERIAL CONNECTOR	BARRIER WIRE (COLOR)
PIN 1 (GND)	BLACK
PIN 2 (RS485/A)	WHITE
PIN 3 (RS485/B)	RED

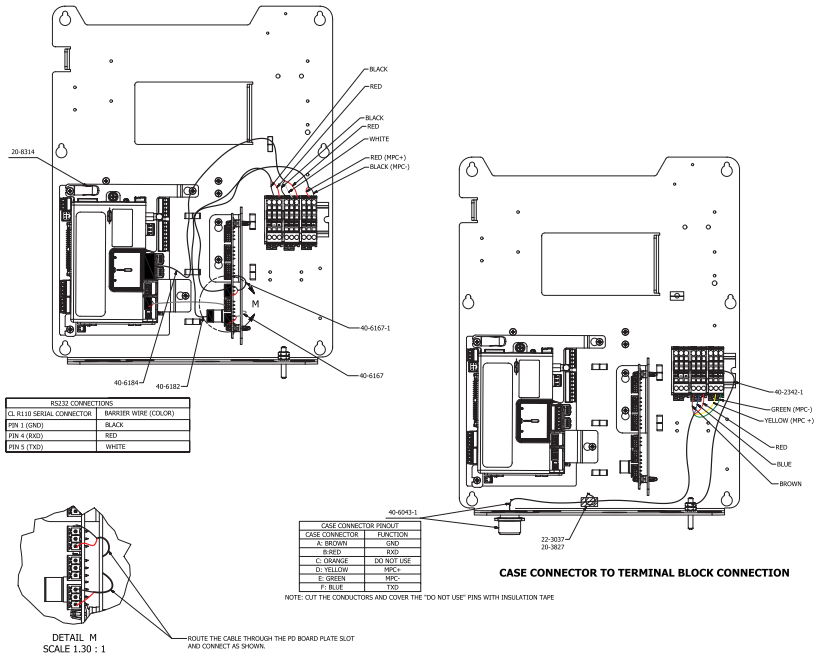
CASE CONNECTOR PINOUT	
CASE CONNECTOR	FUNCTION
A: BROWN	DO NOT USE
B:RED	RS485/B
C: ORANGE	DO NOT USE
D: YELLOW	MPC+
E: GREEN	MPC-
F: BLUE	RS485/A

NOTE: CUT THE CONDUCTORS AND COVER THE "DO NOT USE" PINS WITH INSULATION TAPE

DETAIL J
SCALE 1.30 : 1

CASE CONNECTOR TO BARRIER CONNECTION

Terminal Block Connections



RS232 CONNECTIONS	
CL R110 SERIAL CONNECTOR	BARRIER WIRE (COLOR)
PIN 1 (GND)	BLACK
PIN 4 (RXD)	RED
PIN 5 (TXD)	WHITE

CASE CONNECTOR PINOUT	
CASE CONNECTOR	FUNCTION
A: BROWN	GND
B:RED	RXD
C: ORANGE	DO NOT USE
D: YELLOW	MPC+
E: GREEN	MPC-
F: BLUE	TXD

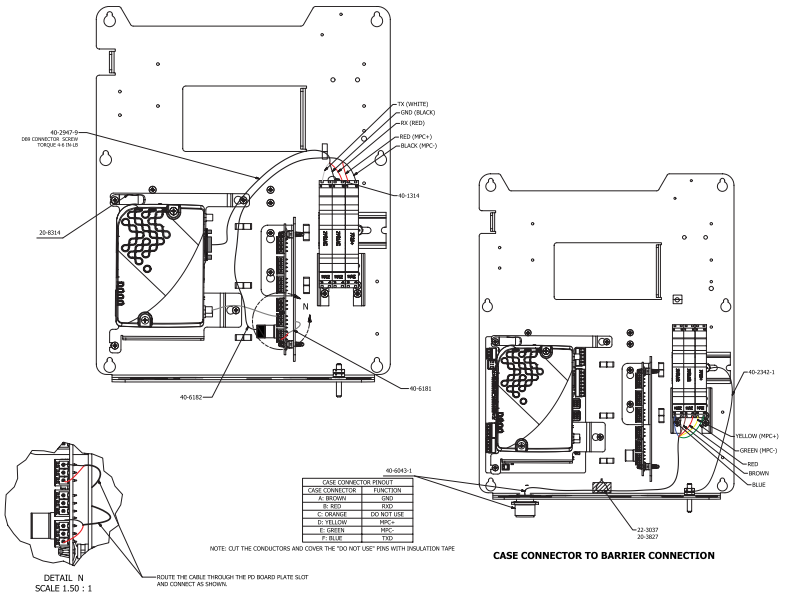
NOTE: CUT THE CONDUCTORS AND COVER THE "DO NOT USE" PINS WITH INSULATION TAPE

DETAIL M
SCALE 1.30 : 1

CASE CONNECTOR TO TERMINAL BLOCK CONNECTION

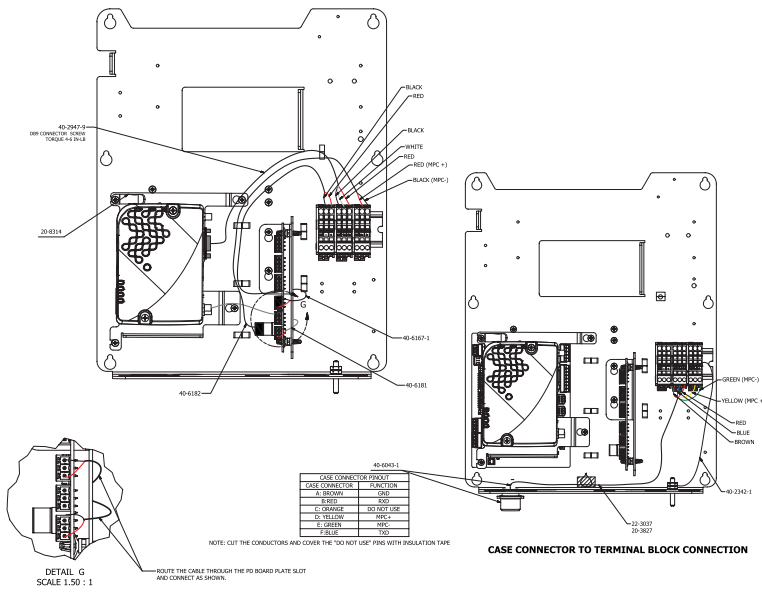
POWER/COMMUNICATION BOX WIRING (WITH RV50/RV50X MODEM)

Barrier Connections

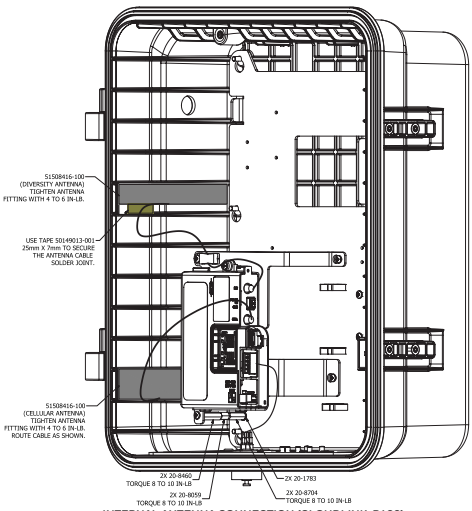


CASE CONNECTOR TO BARRIER CONNECTION

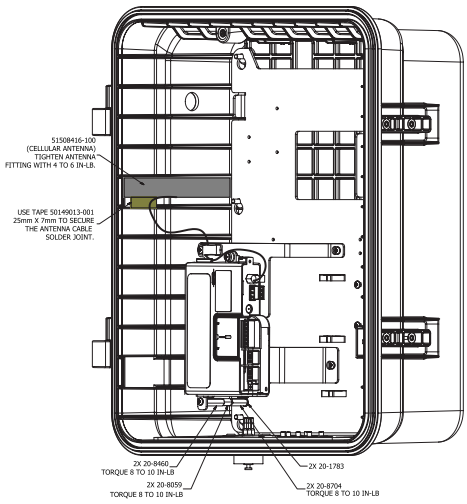
Terminal Block Connections



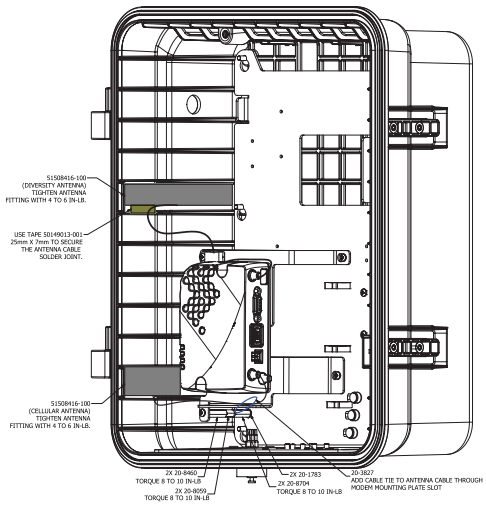
CASE CONNECTOR TO TERMINAL BLOCK CONNECTION



INTERNAL ANTENNA CONNECTION (CLOUDLINK R100)



INTERNAL ANTENNA CONNECTION (CLOUDLINK R110)



INTERNAL ANTENNA CONNECTION (RV50/RV50X)

For more information:

To learn more about Honeywell's Smart Gas Metering Solutions, visit www.honeywellprocess.com or contact your Honeywell Process Solutions representative.

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NOTES

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