Intelligent Equipment® for Daikin Pathfinder® and Trailblazer® Air-cooled Chillers, Magnitude® Magnetic Bearing Chillers, Rebel® and Maverick® II Commercial Packaged Rooftops, Rebel Applied™ and RoofPak® Applied Packaged Rooftops and Outdoor Air Handling Units

Models: AGZ-D, AGZ-E, AMZ, AWS, AWV, WMC, DPS, DPSA, MPS, RAH, RDS, RDT, RPR, and RPS
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Revision History

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<tr>
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<th>Release Date</th>
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<tr>
<td>IM 1240-7</td>
<td>March 2020</td>
<td>Update to WMC connection to Gateway</td>
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<td></td>
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<td>Addition of Wi-Fi Configuration (Generation 2 Gateway), Ethernet</td>
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<td>LAN Configuration (Generation 2 Gateway), and Cellular Signal</td>
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<td>Verification (Generation 2 Gateway) sections</td>
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<td>IM 1240-6</td>
<td>June 2019</td>
<td>Changes to the Intelligent Equipment gateway hardware</td>
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<td>IM 1240-5</td>
<td>December 2018</td>
<td>Additions of rooftop systems, replaces IM 1219</td>
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<tr>
<td>IM 1240-4</td>
<td>September 2018</td>
<td>Addition of WMC &amp; AMZ chillers, Gateway-on-the-Go, and IE Express</td>
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<tr>
<td>IM 1240-3</td>
<td>March 2018</td>
<td>Addition of Pathfinder AWV chiller</td>
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<tr>
<td>IM 1240-2</td>
<td>November 2016</td>
<td>Revised LAN configuration instructions</td>
</tr>
<tr>
<td>IM 1240-1</td>
<td>November 2015</td>
<td>Initial release</td>
</tr>
<tr>
<td>IM 1240</td>
<td>May 2015</td>
<td>Revised LAN configuration instructions</td>
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Reference Documents

<table>
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<tr>
<th>Number</th>
<th>Company</th>
<th>Title</th>
<th>Source</th>
</tr>
</thead>
</table>

Limited Warranty

Consult your local Daikin Representative for warranty details. To find your local Daikin Representative, go to www.DaikinApplied.com.

General Information

This manual contains the information needed to install and configure the Intelligent Equipment solution on MicroTech® II Water Cooled Chiller model WMC (Magnitude®); MicroTech III Air Cooled Chiller models: AGZ-D, AGZ-E, AWV, and AMZ (Pathfinder® and Trailblazer®); Packaged Rooftop models: DPS (Rebel®), MPS (Maverick® II), RPS, RPR, RDT, and RFS (RoofPak), and Outdoor Air Handling Unit models: RDS and RAH (RoofPak®). For installation Technical Support, please contact the Daikin Applied Controls Support Group at (866) 462-7829.

Product Description

The Daikin Applied Intelligent Equipment® Software-as-a-Service (SaaS) solution provides facility and equipment management, monitoring, control, analysis, and decision-making via a secure, cloud-communicating machine-to-machine gateway that captures, analyzes and delivers building and equipment information, and third party content (e.g., weather, utility, and CRM data), to a user device (smart phone, tablet, etc.) via wireless (cellular, Wi-Fi) or local area network (LAN) connection.

Intelligent Equipment provides real-time power monitoring of individual equipment. The user can view unit statuses, modes, temperatures, pressures and setpoints, and make adjustments to modes, schedules and temperature setpoints. Messages and alarms can be viewed, acknowledged and cleared.

User accounts are role-based, and user interaction, including setpoint changes and clearing of alarms, is logged for later reporting. System updates can be delivered automatically from the cloud. Built-in trending tools provide easy access to unit performance history. Hardware components consist of: one Machine-to-Machine (M2M) Gateway, one Energy Management Module (EMM), two Antennas, and three Current Transformers (CT’s).

NOTE: EMM and CT’s are not included with Gateway-on-the-Go, IE Express, or WMC kits.
Hazardous Information Messages

Recognize Safety Symbols, Words and Labels

The following symbols and labels are used throughout this manual to indicate immediate or potential hazards. It is the owner and installer’s responsibility to read and comply with all safety information and instructions accompanying these symbols. Failure to heed safety information increases the risk of property damage and/or product damage, serious personal injury or death. Improper installation, operation and maintenance can void the warranty.

**CAUTION**

Cautions indicate potentially hazardous situations, which can result in personal injury or equipment damage if not avoided.

- Static sensitive components. Can cause equipment damage.
- Discharge any static electrical charge by touching the bare metal inside the control panel before performing any service work. Never unplug cables, circuit board terminal blocks, or power plugs while power is applied to the panel.

**WARNING**

Warnings indicate potentially hazardous situations, which can result in property damage, severe personal injury, or death if not avoided.

**DANGER**

Dangers indicate a hazardous situation which will result in death or serious injury if not avoided. Electric shock hazard. Can cause personal injury or equipment damage. This equipment must be properly grounded. Connections and service to the MicroTech II WMC Water Cooled chiller, MicroTech III Air Cooled Chiller Packaged Rooftop, or Outdoor Air Handling Unit Controller, Machine-to-Machine Gateway and Energy Management Module must be performed only by personnel knowledgeable in the operation of the equipment being controlled.

**NOTICE**

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with this instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his or her own expense. Daikin disclaims any liability resulting from any interference or for the correction thereof.
Components

--- CAUTION ---
Extreme temperature hazard. Can cause damage to system components. The Intelligent Equipment hardware is designed to operate in ambient temperatures from -22 to 158 degrees F (-30 to 70 degrees C) and in relative humidity up to 90% (non-condensing).

Machine-to-Machine (M2M) Gateway

The M2M Gateway is a factory tested and commissioned device, which analyzes and delivers data to the cloud via wireless (Wi-Fi, cellular) or local area network (LAN) connection. The M2M Gateway implements security, including data delivery via secure HTTPS using SSL, and whitelisting protection. In the case of a unit ordered with Intelligent Equipment, the M2M gateway will be factory-installed in the unit control panel. For installation in retrofit applications, see document section titled, Chiller Installation Instructions on page 8 or Rooftop Installation Instructions on page 22. There have been two generations of the M2M Gateway. Generation 1 had a black case, while Generation 2 has a silver case. Images of both generations are located throughout this manual.

Antennas

The provided Cellular/Wi-Fi antennas must be field-mounted, regardless of whether the Daikin Applied Intelligent Equipment solution was ordered factory-installed or for retrofit installation. For cellular installations using the Generation 2 Gateway, both antennas are used. For cellular installations using Generation 1 Gateway and for all Wi-Fi installations, only one antenna is used. The antenna has a magnetic base, which is suitable for directly mounting to the unit control panel or case.

Energy Management Module (EMM)

(Not on Gateway-on-the-Go, IE Express, or WMC kits)

The EMM is a factory tested and commissioned device, which monitors unit voltage, current, and power and transmits this data to the M2M Gateway for delivery to the cloud. In the case of a unit ordered with Intelligent Equipment, the EMM will be factory-installed in the unit control panel. For installation in retrofit applications, see document section titled, Installing Energy Management Module on page 10.

--- Current Transformers (CT’s) ---
(Not on Gateway-on-the-Go, IE Express, or WMC kits)

Three Current Transformers (CT’s) are supplied with the Intelligent Equipment solution. At the time of order, the Maximum Current Ampacity (MCA) for the unit is specified, thereby driving selection of appropriately-sized CT’s (See Table 1 for CT sizing and specifications). In the case of a unit ordered with Intelligent Equipment, the CT’s will be factory-installed within the unit control panel. For installation of the CT’s in retrofit applications, see document section titled, Installing Split-Core CT’s on page 17 and Installing Rogowski Coil CT’s on page 18.

Power Supply

A 12 or 24 VDC Power Supply is provided to power the M2M Gateway. In the case of a unit ordered with Intelligent Equipment, the power supply will be factory-installed in the unit control panel. For installation of the power supply in retrofit applications, see document section titled, Installing Power Supply on page 10.

Fuse Block

(Not on Gateway-on-the-Go, IE Express, or WMC kits)

A Fuse Block is provided to provide over-current protection for the Energy Management Module (EMM). Replaceable 5Amp fuses are pre-installed in the Fuse Block. In the case of a unit ordered with Intelligent Equipment, the Fuse Block will be factory-installed in the unit control panel. For installation of the Fuse Block in retrofit applications, see document section titled, Installing Fuse Block on page 11.

USB-to-Ethernet Adapter

(Generation 1 Gateway only)

For installations where a Local Area Network (LAN) connection is to be used, a USB-to-Ethernet adapter is included in all shipments. The adapter is necessary because the M2M Gateway has a single Ethernet port, which is connected to the MicroTech III controller, and, therefore, unavailable for connection to the LAN.

Table 1: CT Sizing and Specifications

<table>
<thead>
<tr>
<th>Key Specifications</th>
<th>50A Model</th>
<th>100A Model</th>
<th>200A Model</th>
<th>600A Model</th>
<th>1000A Model</th>
<th>Rogowski Coil Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Window Size</td>
<td>0.4” (10 mm)</td>
<td>1” (25 mm)</td>
<td>1” (25 mm)</td>
<td>1.25” (31.8 mm)</td>
<td>2” (50.8 mm)</td>
<td>5”</td>
</tr>
<tr>
<td>Current Range</td>
<td>0.25 – 80A AC</td>
<td>1 – 200A AC</td>
<td>1 – 300A AC</td>
<td>12 – 780A AC</td>
<td>20 – 1300A AC</td>
<td>10 – 1300A AC</td>
</tr>
<tr>
<td>Output</td>
<td>333 mV at rated current</td>
<td>333 mV at rated current</td>
<td>333 mV at rated current</td>
<td>333 mV at rated current</td>
<td>333 mV at rated current</td>
<td>333 mV at rated current</td>
</tr>
<tr>
<td>Ratio Error</td>
<td>&lt;0.5% from 0.25 – 80A AC (typical)</td>
<td>&lt;0.3% from 1 – 200A AC (typical)</td>
<td>&lt;1.0% from 1 – 300A AC (typical)</td>
<td>&lt;1% from 12 – 780A AC (typical)</td>
<td>&lt;1% from 20 – 1300A AC (typical)</td>
<td>&lt;1% from 10 – 1300A AC (typical)</td>
</tr>
<tr>
<td>Phase Error</td>
<td>&lt;1.5° from 1 – 80A AC &lt;2° from 0.25 – 1A AC</td>
<td>&lt;0.5° from 1 – 200A AC</td>
<td>&lt;0.5° from 1 – 300A AC</td>
<td>&lt;2° from 12 – 780A AC</td>
<td>&lt;2° from 20 – 1300A AC</td>
<td>&lt;2° from 10 – 1300A AC</td>
</tr>
</tbody>
</table>
Unpacking

Material shipped loose

Factory Installed Intelligent Equipment
If the Intelligent Equipment solution was ordered with the chiller, rooftop, or air handling unit, it shipped with the M2M Gateway, EMM, CT’s, Powers Supply and Fuse Block already installed in the control enclosure, and associated interconnections already made. On chillers, the antenna bases are shipped inside the control enclosure, along with the antenna flags and Ethernet adapter. The coaxial cable for the antenna bases must be routed to the control enclosure once the antenna bases are installed in the field. If needed, the Ethernet adapter is field-installed (Generation 1 Gateway only). For rooftop units, the antenna bases are pre-installed, antenna flags and Ethernet adapter ship inside the schematics envelope for the unit.

Retrofit Intelligent Equipment on Chillers
When the Intelligent Equipment solution is ordered for retrofit installation, the following components will ship as a kit:

- M2M Gateway
- Power Supply
- EMM (Not on Gateway-on-the-Go or IE Express kits)
- Fuse Block (with 5A Fuses pre-installed) (Not on Gateway-on-the-Go or IE Express kits)
- Antenna flags and bases
- Three Current Transformers (CT’s) (Not on Gateway-on-the-Go or IE Express kits)
- 3 ft. USB cable (Not on Gateway-on-the-Go or IE Express kits)
- 6 ft. Ethernet Patch cable
- USB-to-Ethernet Adapter (Generation 1 Gateway only)
- 6” EMM Wiring Harness (Not on Gateway-on-the-Go or IE Express kits)
- 6 ft. EMM Wiring Harness (Not on Gateway-on-the-Go or IE Express kits)
- Hardware packet, including (1) patch plate with two watertight grommets pre-installed
- (2) 5/8” bushings
- (1) grounding harness
- (1) 3-wire voltage harness, wire ties, wire tie hangers
- (12) self-tapping sheet metal screws
- (1) section of 600V-rated heat shrink tubing.

Upon receiving, verify that all components are present, and notify the supplier of any shortage.

Retrofit Intelligent Equipment on Rooftop, or Air Handling Unit
When the Intelligent Equipment solution is ordered for retrofit installation on a rooftop or air handling unit, the following components will ship loose:

- Two Mounting brackets. One bracket contains the M2M Gateway and power supply, the other contains the EMM and fuse block (with 5A Fuses pre-installed) (EMM and Fuse block not included for Gateway-on-the-Go or IE Express kits)
- Antenna flags and bases
- Three Current Transformers (CT’s) (Not on Gateway-on-the-Go or IE Express kits)
- 3 ft. USB cable (Not on Gateway-on-the-Go or IE Express kits)
- 6 ft. Ethernet Patch cable
- USB-to-Ethernet Adapter (Generation 1 Gateway only)
- 6” EMM Wiring Harness (Not on Gateway-on-the-Go or IE Express kits)
- 6 ft. EMM Wiring Harness (Not on Gateway-on-the-Go or IE Express kits)
- Hardware packet, including (1) patch plate with two watertight grommets pre-installed
- (2) 5/8” bushings
- (1) grounding harness
- (1) 3-wire voltage harness, wire ties, wire tie hangers
- (12) self-tapping sheet metal screws
- (1) section of 600V-rated heat shrink tubing.

Upon receiving, verify that all components are present, and notify the supplier of any shortage.

Necessary Tools

- Corded (or powerful cordless) Drill
- 7/8” Step Drill Bit (suitable for drilling through metal enclosure)
- 1/4” Drill Bit for wire tie hangers (suitable for drilling through metal enclosure)
- 3/32” Drill Bit for pilot holes (suitable for drilling through metal enclosure)
- Multimeter
- Wire strippers
- SAE hex wrench set
- Precision screwdriver set
- #2 Phillips screwdriver
- #2 Flat screwdriver
- 5/16” Nut driver
- Hammer
- Pliers
- Small carpenter square (8” × 12”)
- Level
- Clear silicone sealant
Retrofit Installation

⚠️ DANGER
Electric shock hazard. Can cause personal injury or equipment damage.

Prior to installing Intelligent Equipment hardware, power must be removed from the unit. This means removing power at the breaker panel serving the unit, and following proper lockout/tagout procedures at said breaker panel for the duration of the install. Power should not be reapplied until all electrical interconnections have been made and verified.

This equipment must be properly grounded. Connections and service to the MicroTech II WMC Water-Cooled chiller, MicroTech III Air-cooled Chiller Controller, Packaged Rooftop or Outdoor Air Handling unit, Machine-to-Machine Gateway and Energy Management Module must be performed only by personnel knowledgeable in the operation of the equipment being controlled.

⚠️ CAUTION
Static sensitive components. Can cause equipment damage.

Discharge any static electrical charge by touching the bare metal inside the control panel before performing any service work. Never unplug cables, circuit board terminal blocks, or power plugs while power is applied to the panel.

⚠️ WARNING
Sharp edges on sheet metal and fasteners can cause personal injury. This equipment must be installed, operated, and serviced only by an experienced installation company and fully trained personnel.

⚠️ CAUTION
To avoid damaging wires or components, verify clearance in and around the point of penetration prior to any drilling

During any drilling, ensure that resultant metal shavings are not allowed to contact unit electronics.

Subsequent to any drilling, remove all resulting metal shavings from the control enclosure.

⚠️ NOTICE
For Cellular and Wi-Fi installations, do not power the M2M Gateway until the antennas have been installed and connected.

NOTE: The Intelligent Equipment retrofit installation should take approximately one hour for a skilled HVAC technician.
Chiller Installation Instructions

Installing M2M Gateway

Prior to installing any Intelligent Equipment components, power must be removed from the unit. Power must be removed at the breaker panel serving the unit, and proper lockout/tagout procedures should be followed for the duration of the install. After removing unit power at the breaker panel, the installer must verify the absence of power at the unit using a multimeter. Only if power has been verified absent, should the technician begin the install. The retrofit kit is shipped with the M2M gateway shipped loose.

The M2M gateway must be installed inside the unit control panel. The installation location will vary depending on the unit model and size of the control enclosure (see Figure 1 through Figure 5 for correct component locations on AGZ and AWV models). On AWS models, locate IE Hardware as space allows within control enclosure. Figure 6 and Figure 7 provide the typical layout of AWS small and large enclosures. On WMC chillers, only the M2M gateway and gateway power supply are used. Locate these components within the unit control enclosure as space allows. Figure 8 shows a typical install for WMC. For AMZ chillers, field verify component locations. Begin by positioning the M2M gateway on the backplane of the enclosure and marking the screw holes. Next, drill pilot holes, through the marks just created, using a 7/64" drill bit. Finally, attach the M2M gateway to the backplane using (4) of the provided #6 sheet metal screws (5/16" head). On Generation 1 gateways only, install the ring terminal on one end of the M2M ground conductor under one of the (4) sheet metal screws (Figure 9). The M2M ground conductor has ring terminals at both ends. Termination for the other end of this conductor is described in the section entitled, Connection of M2M Gateway and EMM to Ground on page 19.

**Figure 1: Component Locations – AGZ-D and E Small Panel**

**Figure 2: Component Locations – AGZ-D and E Medium Panel**
Figure 3: Component Locations – AGZ-D Large Panel

Figure 4: Component Locations – AGZ-E Large Panel

Figure 5: Component Locations – AWV Large Panel

Figure 6: Component Locations – AWS Small Panel
Installing Energy Management Module
(Not on Gateway-on-the-Go, IE Express, or WMC kits)

Prior to installing any Intelligent Equipment components, power must be removed from the unit. Power must be removed at the breaker panel serving the unit, and proper lockout/tagout procedures should be followed for the duration of the install. After removing unit power at the breaker panel, the installer must verify the absence of power at the unit using a multimeter. Only if power has been verified absent, should the technician begin the install. The retrofit kit is shipped with the EMM shipped loose. The EMM must be installed inside the unit control panel.

The installation location will vary depending on the unit model and size of the control enclosure (see Figure 1 through Figure 5 for correct component locations on AGZ and AWV models). On AWS models, locate Intelligent Equipment hardware as space allows within the control enclosure. Figure 6 and Figure 7 provide a typical layout of AWS small and large enclosures. For AMZ chillers, field verify component locations. Begin by positioning the EMM on the backplane of the enclosure and marking the screw holes. Next, drill pilot holes, through the marks just created, using a 7/64" drill bit. Finally, attach the EMM to the backplane using (4) of the provided #6 sheet metal screws (5/16" head).

Installing Power Supply

Prior to installing any Intelligent Equipment components, power must be removed from the unit. Power must be removed at the breaker panel serving the unit, and proper lockout/tagout procedures should be followed for the duration of the install. After removing unit power at the breaker panel, the installer must verify the absence of power at the unit using a multimeter. Only if power has been verified absent, should the technician begin the install.

The retrofit kit is shipped with the power supply shipped loose. The power supply must be installed inside the unit control panel. The installation location will vary depending on the unit model and size of the control enclosure (see Figure 1 through Figure 5 for correct component locations on AGZ and AWV models). On AWS models, locate Intelligent Equipment hardware as space allows within the control enclosure. Figure 6 and Figure 7 provide a typical layout of AWS small and large enclosures. On WMC chillers, only the M2M gateway and gateway power supply are used. Locate these components within the unit control enclosure as space allows. Figure 8 shows a typical install for WMC. For AMZ chillers, field verify component locations.

Begin by positioning the power supply on the backplane of the enclosure and marking the screw holes. Next, drill pilot holes, through the marks just created, using a 7/64" drill bit. Finally, attach the power supply to the backplane using (2) of the provided #6 sheet metal screws (5/16" head).
Installing Fuse Block
(Not on Gateway-on-the-Go, IE Express, or WMC kits)

Prior to installing any Intelligent Equipment components, power must be removed from the unit. Power must be removed at the breaker panel serving the unit, and proper lockout/tagout procedures should be followed for the duration of the install. After removing unit power at the breaker panel, the installer must verify the absence of power at the unit using a multimeter. Only if power has been verified absent, should the technician begin the install.

The retrofit kit is shipped with the fuse block shipped loose. The fuse block must be installed inside the unit control panel. The installation location will vary depending on the unit model and size of the control enclosure (see Figure 1 through Figure 5 for correct component locations on AGZ and AWV models). On AWS models, locate Intelligent Equipment hardware as space allows within the control enclosure. Figure 6 and Figure 7 provide a typical layout of AWS small and large enclosures. For AMZ chillers, field verify component locations.

Begin by removing the fuse covers and fuses from the fuse block (Figure 10). Prior to removal, make note of fuse orientation within the fuse block. Then, position the fuse block on the backplane of the enclosure and mark the screw holes. Next, drill pilot holes, through the marks just created, using a 1/8” drill bit.

Finally, attach the fuse block to the backplane using (2) of the provided #8 sheet metal screws (5/16” head). Fuses can be reinstalled, but the covers should remain off for subsequent install of necessary wiring.

Control Cabinet Penetrations

Only the antenna cables must be routed to the outside of the control enclosure; all other terminations remain within the control enclosure. This is done using a specific available knockout. The location of the correct knockout will vary depending on the unit model and size of the control enclosure (see Figure 11 through Figure 14 for knockout locations on AGZ and AWV models). On AWS models, field verify an available knockout. Figure 15 and Figure 16 provide the typical layout of AWS small and large enclosures). WMC chillers have available knockouts located on each side of the unit control enclosure and power box. For AMZ chillers, field verify available knockout on rear of panel.

First, determine the correct knockout to remove, then remove it using a hammer, flat screwdriver and pliers. Use the hammer to gently tap the flat blade of a screwdriver into the open slit of the knockout. Once enough separation is gained between the knockout and the panel, use the pliers to fully remove the knockout. Insert the provided 0.875” grommet into the control enclosure from the outside. The knockout is now prepared for routing of the antenna cables.

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**Figure 10: Fuse Block with Covers and Fuses Removed**

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**Figure 11: AGZ Small Enclosure Knockout Location (Rear of Enclosure)**

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**Figure 12: AGZ Medium Enclosure Knockout Location (Rear of Enclosure)**
Figure 13: AGZ Large Enclosure Knockout Location (Rear of Enclosure)

Figure 14: AWV Large Enclosure Knockout Location (Rear of Enclosure)

Figure 15: AWS Small Enclosure Knockout Location (Rear of Enclosure)

Figure 16: AWS Large Enclosure Knockout Location (Rear of Enclosure)
Wiring Interconnections

**DANGER**

Electric shock hazard. Can cause personal injury or equipment damage.

Prior to installing Intelligent Equipment hardware, power must be removed from the unit. This means removing power at the breaker panel serving the unit, and following proper lockout/tagout procedures at said breaker panel for the duration of the install. Power should not be reapplied until all electrical interconnections have been made and verified.

This equipment must be properly grounded. Connections and service to the MicroTech II WMC Water-Cooled chiller, MicroTech III Air cooled Chiller, Packaged Rooftop, or Outdoor Air Handling Unit Controller, Machine-to-Machine Gateway and Energy Management Module must be performed only by personnel knowledgeable in the operation of the equipment being controlled.

**CAUTION**

Static sensitive components. Can cause equipment damage.

Discharge any static electrical charge by touching the bare metal inside the control panel before performing any service work. Never unplug cables, circuit board terminal blocks, or power plugs while power is applied to the panel.

**WARNING**

Care must be taken to ensure a minimum of 5 inches of clearance between all cables and conductors with 300V-rated insulation or less and areas of the control enclosure containing higher voltage components and conductors.

**NOTICE**

In the event that 300V or lower rated cables and conductors cannot be practically isolated from 600V-rated cables and conductors, a section of 600V-rated shrink wrap tubing is included in the installation kit. This tubing can be cut-to-fit and placed over the lower voltage rated cables and conductors to increase their rating to 600V.

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**M2M Gateway Connection to MTIII**

The M2M Gateway is connected to the MicroTech III unit controller via Ethernet. For Generation 1 gateways, connect one end of the provided 6 ft. Ethernet Patch cable to the M2M port marked, “ETH”, and the other end to the MicroTech III Unit controller port marked, “TIP” (Figure 17).

For Generation 2 gateways, connect one end of the provided 6 ft. Ethernet Patch cable to the M2M port marked, “ETH1”, and the other end to the MicroTech III Unit controller port marked, “TIP” (Figure 18).

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**Figure 17: ‘ETH’ and ‘TIP’ Ports (Generation 1 Gateway)**

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**Figure 18: ‘ETH1’ and ‘TIP’ Ports (Generation 2 Gateway)**
M2M Gateway Connection to WMC

The Generation 1 M2M Gateway is connected to the WMC-D vintage HMI PC via Ethernet. Connect one end of the provided 6 ft. Ethernet Patch cable to the M2M port marked, “ETH”, and the other end to the HMI PC port marked “LAN2” or “X1P1” depending on HMI hardware (Figure 21).

The Generation 2 M2M Gateway is also connected to the WMC-D vintage HMI PC via Ethernet. Connect one end of the provided 6 ft. Ethernet Patch cable to the M2M port marked, “ETH1”, and the other end to the HMI PC port marked “LAN2” or “X1P1” depending on HMI hardware (Figure 22).

M2M Gateway Connection to EMM
(Not on Gateway-on-the-Go, IE Express, or WMC kits)

The Generation 1 M2M Gateway is connected to the EMM via USB. Connect the type-A end of the provided 3 ft. USB cable to the M2M port marked, “USB1”, and the type-B end of the same cable to the USB port of the EMM (Figure 19).

The Generation 2 M2M Gateway is also connected to the EMM via USB. Connect the type-A end of the provided 3 ft. USB cable to the M2M port marked, “USB 0" OR “USB 1”, and the type-B end of the same cable to the USB port of the EMM (Figure 20).
Connection of Power Supply

The Generation 1 M2M Gateway is powered by a 120VAC (primary) to 24VDC (secondary) power supply. On Generation 1 gateways, the 24 VDC connection is made via a pre-fabricated, keyed plug coming from the low voltage end of the power supply. Connect this plug to the M2M Gateway receptacle marked, “Power Input” (Figure 23).

Generation 2 gateways use a slightly different power supply, which does not have the keyed plug on the 12 or 24 VDC connection. The 12 or 24 VDC connection is made by wiring the power supply red wire to the gateway terminal marked, “PWR IN +”, and the power supply black wire to the gateway terminal marked, “PWR IN -” (Figure 24).

On both Generation 1 and Generation 2 gateways, the 120VAC cable has the jacket and insulation pre-stripped, with the ends of both the Line and Neutral wires tinned. On a MicroTech III AGZ-D or AGZ-E unit, connect the Line (brown) conductor to terminal TB1-11B and the Neutral (blue) conductor to terminal TB1-32B (Figure 25). On a MicroTech III AWV or AWS unit, connect the Line (brown) conductor to terminal MQ-11 and the Neutral (blue) conductor to terminal MQ-17 (Figure 26).

On a MicroTech II WMC chiller, connect the Line (brown) conductor to terminal L1-30 and the Neutral (blue) conductor to terminal L2-29 (Figure 27). On a MicroTech III AMZ connect the Line (brown) conductor to terminal TBH-7 and the Neutral (blue) conductor to terminal TB120N-21.

Figure 23: M2M Power Input (Generation 1 Gateway)

Figure 24: M2M Power Input (Generation 2 Gateway)

Figure 25: AGZ-D and AGZ-E 120VAC Wiring

Figure 26: AWV and AWS 120VAC Wiring

Figure 27: WMC 120VAC Wiring
**Connection of EMM to Split-Core CT’s**

(Not on Gateway-on-the-Go, IE Express, or WMC kits)

The high voltage side of the EMM has a hinged cover, which must be opened. First, remove the two installation screws (Figure 28), then flip the cover open. The EMM uses an open style hinge, so it may be easier to completely remove the hinged door while installing conductors.

The CT’s have built-in output conductors, which must be connected to the EMM. Insert the white conductor from the CT on Line 1 into the CT_A+ terminal, and the black conductor from the CT on Line 1 into the CT_A- terminal. Next, insert the white conductor from the CT on Line 2 into the CT_B+ terminal, and the black conductor from the CT on Line 2 into the CT_B- terminal. Finally, insert the white conductor from the CT on Line 3 into the CT_C+ terminal, and the black conductor from the CT on Line 3 into the CT_C- terminal. (Figure 29).

**Connection of EMM to Rogowski Coil CT’s**

(Not on Gateway-on-the-Go, IE Express, or WMC kits)

Chillers with larger incoming power bundles will require the use of a flexible CT called a Rogowski coil. The connection of the flexible CT is similar to that of a split-core CT. The Rogowski coil CT’s have built-in output conductors, which must be connected to the EMM. Insert the white conductor from the Rogowski coil CT on Line 1 into the CT_A+ terminal, and the green conductor from the Rogowski coil CT on Line 1 into the CT_A- terminal. Next, insert the white conductor from the Rogowski coil CT on Line 2 into the CT_B+ terminal, and the green conductor from the Rogowski coil CT on Line 2 into the CT_B- terminal. Finally, insert the white conductor from the Rogowski coil CT on Line 3 into the CT_C+ terminal, and the green conductor from the Rogowski coil CT on Line 3 into the CT_C- terminal. Figure 30 provides an example of these connections.

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**Figure 28: Hinged Cover Screw Locations**

**Figure 29: Connection of EMM to CT’s**

**Figure 30: Connection of EMM to Rogowski Coil CT’s**
Connection of Rogowski Coil CT’s to Power Supply
(Not on Gateway-on-the-Go, IE Express, or WMC kits)

Unlike a standard split-core CT, the Rogowski coil CT’s have a built-in amplifier/integrator that must be powered. They are shipped with a 24VAC to 24VDC power supply with a terminal strip, which is used to power the three Rogowski coil CT amplifiers. The terminal strip must be secured to the control panel backplane using the provided sheet metal screws. Then, connect the Red wire from each Rogowski coil CT to the Vout (24VDC+) terminal block, and the Black wire from each Rogowski coil CT to the GND (Vout) terminal block (Figure 31).

The power supply is provided with a length of cable for connecting it to 24VAC in the unit control enclosure. On an AGZD or AGZE chiller, terminal Vin on the power supply should be connected to terminal TB2-42 or TB2-43, and terminal GND (Vin) on the power supply should be connected to terminal TB2-81, TB2-83, or TB2-84 (Figure 33). On an AWV chiller, terminal Vin on the power supply should be connected to terminal MS-10, and terminal GND (Vin) on the power supply should be connected to terminal MS-20 (Figure 34). On an AWS chiller, terminal Vin on the power supply should be connected to terminal MQ-10, and terminal GND (Vin) on the power supply should be connected to terminal MQ-20 (Figure 35).

NOTE: Always confirm terminal designations on unit As-Built wiring diagram.

Installing Spilt-Core CT’s
(Not on Gateway-on-the-Go, IE Express, or WMC kits)

Current Transformers (CT’s) are split-core type, to make installation easier. Snap split-core CT connected to EMM terminal CT_A on phase L1, snap split-core CT connected to EMM terminal CT_B on phase L2, and snap split-core CT connected to EMM terminal CT_C on phase L3 (Figure 32). Ensure that the “Load” indicator on the CT is oriented correctly.

Figure 32: CT Installation

Figure 31: Rogowski Coil Terminal Block
Installing Rogowski Coil CT's
(Not on Gateway-on-the-Go, IE Express, or WMC kits)

Snap the Rogowski Coil CT connected to EMM terminal CT_A on phase L1, the Rogowski Coil CT connected to EMM terminal CT_B on phase L2, and the Rogowski Coil CT connected to EMM terminal CT_C on phase L3 (Figure 36). Ensure that the “Load” indicator on the CT is oriented correctly. The molded arrow on the snap of the CT should be pointing toward the load.

Figure 33: Rogowski Coil Power Supply Connection – AGZ

Figure 34: Rogowski Coil Power Supply Connection – AWV

Figure 35: Rogowski Coil Power Supply Connection – AWS

Figure 36: Rogowski Coil Installation
Connection of EMM to Line Voltage
(Not on Gateway-on-the-Go, IE Express, or WMC kits)

The EMM is connected to Line Voltage through the Fuse Block. Begin by removing the fuse covers and fuses from the Fuse Block. Prior to removal, make note of fuse orientation within the fuse block. Next, using the provided 6" wiring harness, connect the “VinA” (Tan), “VinB” (Orange), and “VinC” (Violet) terminals on the EMM to the “Load” terminals on the Fuse Block (Figure 37).

If needed, remove the plastic protective shield from Power Distribution Block 1 (PD1). Using the provided 6 ft. wiring harness, connect the corresponding “Line” terminals on the Fuse Block to the control panel (PD1) terminals “T1”, “T2”, and “T3”, such that EMM terminal “VinA” (Tan) is connected to PD1-T1, “VinB” (Orange) is connected to PD1-T2, and “VinC” (Violet) is connected to PD1-T3 (Figure 38).

Connection of M2M Gateway and EMM to Ground

One end of the M2M Gateway ground conductor should already be connected to the M2M case (see section entitled, “Installing M2M Gateway”). Connect the tinned end of the EMM ground conductor to the “GND” terminal on the EMM itself (Figure 39). Connect the free ring terminals for both the M2M and EMM to the nearest available grounding lug in the control enclosure (Figure 40).

Once all connections are made to the line voltage side of the EMM, close the hinged cover, and reinstall the screws. Figure 41 depicts an EMM with all high voltage terminations made and the hinged cover reinstalled.
Antenna Installation

NOTE: On Generation 2 Gateways, both antennas will be installed and connected to the M2M Gateway.

DANGER

Electric shock hazard. Can cause personal injury or equipment damage.

Prior to installing Intelligent Equipment hardware, power must be removed from the unit. This means removing power at the breaker panel serving the unit, and following proper lockout/tagout procedures at said breaker panel for the duration of the install. Power should not be reapplied until all electrical interconnections have been made and verified.

This equipment must be properly grounded. Connections and service to the MicroTech II WMC Water Cooled chiller, MicroTech III Air Cooled Chiller, Packaged Rooftop, or Outdoor Air Handling Unit Controller, Machine-to-Machine Gateway and Energy Management Module must be performed only by personnel knowledgeable in the operation of the equipment being controlled.

CAUTION

Static sensitive components. Can cause equipment damage.

Discharge any static electrical charge by touching the bare metal inside the control panel before performing any service work. Never unplug cables, circuit board terminal blocks, or power plugs while power is applied to the panel.

WARNING

Sharp edges on sheet metal and fasteners can cause personal injury. This equipment must be installed, operated, and serviced only by an experienced installation company and fully trained personnel.

Mounting

The antennas provided with the Daikin Applied Intelligent Equipment solution (Figure 42) are omni-directional, and have a swiveling base. The antennas should be oriented to avoid interference from structures or other antennas. For initial installation, it is recommended to install the antennas on top of the chiller, rooftop, or air handling unit with enough clearance from the edge to avoid accidental contact or damage. The antenna is held in place by its magnetic base. More information about aiming antennas can be found in the sections, Wi-Fi Configuration (Generation 1 Gateway) on page 33 and Troubleshooting on page 53 of this document.

Figure 42: Wireless Antenna on Magnetic Mounting Base

Wiring of Antenna (If Applicable)

As described previously, the antenna cable must be fed from the outside of the unit through the control enclosure and up to the mounting bracket with the M2M Gateway, EMM, power supply, and fuse block. On a Generation 1 gateway, the connection is made by screwing the SMA coaxial connector onto the appropriate M2M SMA coaxial connector; “3G/GPRS” for cellular or “WLAN” for Wi-Fi. (Figure 43).

For a Generation 2 gateway, the cellular connection is made by screwing the SMA coaxial connector onto the M2M SMA coaxial connectors, “CELL MAIN” and “CELL DIV”. For Wi-Fi, the connection is made by screwing the antenna’s SMA coaxial connector onto the provided reverse polarity SMA adapter, then screwing the reverse polarity SMA adapter onto the “Wi-Fi/BT” connection on the gateway.

Figure 43: 3G and WLAN Connections (Generation 1 Gateway)

Figure 44: Cellular and Wi-Fi Connections (Generation 2 Gateway)
LAN Installation
(If Applicable)

LAN Connection
If using the local area network (LAN) for cloud connectivity on a Generation 1 gateway, a USB-to-Ethernet Adapter must be used. To complete the installation, connect the Ethernet patch cable from the network switch to the Ethernet end of the USB-to-Ethernet Adapter provided with the IE kit. Next, connect the USB end of the USB-to-Ethernet Adapter to the port labeled, “USB2”, on the M2M Gateway (Figure 45).

NOTE: The M2M Gateway will not communicate with the cloud if the USB-to-Ethernet Adapter is connected to the incorrect USB port.

For LAN connection to the Generation 2 gateway, there is no need for a USB-to-Ethernet Adapter. To complete the installation, connect the Ethernet patch cable from the network switch to the port labeled, “Eth0”, on the Generation 2 gateway (Figure 46).

NOTE: The M2M Gateway will not communicate with the cloud if the LAN cable is connected to the incorrect Ethernet port on the gateway.
Rooftop Installation Instructions

Installing Mounting Brackets

Prior to installing the mounting brackets, power must be removed from the unit. Power must be removed at the breaker panel serving the unit, and proper lockout/tagout procedures should be followed for the duration of the install. After removing unit power at the breaker panel, the installer must verify the absence of power at the unit using a multimeter. Only if power has been verified absent, should the technician begin the install.

The retrofit kit is shipped with two mounting brackets: one bracket contains the M2M Gateway and power supply, the other contains the EMM and fuse block (with 5A Fuses pre-installed). The EMM and Fuse block are not included for Gateway-on-the-Go or IE Express. In a retrofit scenario, these brackets must be installed inside the unit control panel. For DPS units, the brackets are designed for installation inside of the main unit control panel, mounted to the top of the unit controller section (see Figure 47 for preferred locations) using the provided sheet metal screws (5/16" head). The bracket containing the M2M Gateway should be mounted to the left of the enclosure, and the bracket containing the EMM should be mounted to the right side of the enclosure (Figure 47).

For MPS units, the brackets are installed inside of the main unit control panel, mounted to the right side of the unit controller section using the provided sheet metal screws (5/16" head). The bracket containing the M2M Gateway should be mounted toward the top of the enclosure, and the bracket containing the EMM should be mounted toward the bottom of the enclosure.

For RPS, RPR, RDT, RFS, RDS and RAH units, the M2M bracket is designed for installation on the inside of the lower, left internal enclosure door (Figure 48), and the EMM bracket is designed for installation on the inside of the lower, right internal enclosure door (Figure 49).

Care must be taken to ensure that the mounting brackets are not installed in such a way as to interfere with closing of the control panel door, or to cover any panel knock-outs. It may be useful to mark the screw holes of the bracket, and drill small pilot holes, before screwing the brackets firmly to the top of the control enclosure.

In some enclosure configurations, particularly with early DPS and MPS units, the control enclosure layout and dimensions may not allow for the desired mounting locations. In these situations, the installer should use discretion in determining suitable replacement locations within the control enclosure, paying special attention to the following limitations:

- When routing wiring through the control enclosure, care must be taken to maintain a minimum of 5 inches of clearance between all cables and conductors with 300V-rated insulation or less and areas of the control enclosure containing higher voltage components and conductors, such as 575V.
- Avoid routing communication cables (Cat 5e, USB, etc.) near sources of line voltage.

For reference, Figure 50 shows suitable alternative locations in an early DPS unit with a smaller control enclosure footprint.

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Figure 47: DPS Bracket Mounting Locations (Generation 1 Gateway shown)

![Figure 47: DPS Bracket Mounting Locations (Generation 1 Gateway shown)](image)

Figure 48: M2M Bracket Mounting Location – RoofPak (Generation 1 Gateway shown)

![Figure 48: M2M Bracket Mounting Location – RoofPak (Generation 1 Gateway shown)](image)
Wire Routing

DANGER
Electric shock hazard. Can cause personal injury or equipment damage.

Prior to installing Intelligent Equipment hardware, power must be removed from the unit. This means removing power at the breaker panel serving the unit, and following proper lockout/tagout procedures at said breaker panel for the duration of the install. Power should not be reapplied until all electrical interconnections have been made and verified.

This equipment must be properly grounded. Connections and service to the MicroTech II WMC Water-Cooled chiller, MicroTech III Air cooled Chiller, MicroTech III Commercial Packaged Rooftop Unit Controller, Applied Packaged Rooftop, or Commercial Outdoor Air Handling Unit, Machine-to-Machine Gateway and Energy Management Module must be performed only by personnel knowledgeable in the operation of the equipment being controlled.

WARNING
Care must be taken to ensure a minimum of 5 inches of clearance between all cables and conductors with 300V-rated insulation or less and areas of the control enclosure containing higher voltage components and conductors.

NOTICE
In the event that 300V or lower rated cables and conductors cannot be practically isolated from 600V-rated cables and conductors, a section of 600V-rated shrink wrap tubing is included in the installation kit. This tubing can be cut-to-fit and placed over the lower voltage rated cables and conductors to increase their rating to 600V.

When routing wiring through the control enclosure, care must be taken to maintain a minimum of 5 inches of clearance between all cables and conductors with 300V-rated insulation or less and areas of the control enclosure containing higher voltage components and conductors, such as 575V. For practical purposes, this means routing all cables and conductors from the high-voltage side of the EMM (Figure 51) away from any cables and conductors connected to the M2M Gateway.

Figure 51: Line Voltage Side of EMM
Figure 52 indicates the expected routing for a typical Maverick II unit, Figure 53 indicates the expected routing for a typical Rebel unit, and Figure 54 and Figure 55 indicate the expected routing for a typical RoofPak (RPS, RPR, RDT, RFS, RDS or RAH) unit. In retrofit situations, the installer should use discretion in determining suitable routing within the control enclosure, in order to ensure the required 5-inch clearance between all cables and conductors with 300V-rated insulation or less and areas of the control enclosure containing higher voltage components and conductors. In RoofPak installations, all non-600V-rated wires (Ethernet, Coax, USB) must be wrapped in the 600V-rated insulation sleeve provided with the retrofit kit.

Figure 52: Typical Maverick II Wire Routing (Generation 1 Gateway shown)

Figure 53: Typical Rebel Wire Routing

Figure 54: Typical RoofPak Wire Routing – Left-Side of Enclosure (Generation 1 Gateway shown)

Figure 55: Typical RoofPak Wire Routing - Right-Side of Enclosure
Control Cabinet Penetrations

Only the antenna cables must be routed to the outside of the control enclosure. All other terminations remain within the control enclosure. To limit the risk of moisture damage, the required external penetration should be made in the lower part of the left stile of the control enclosure for DPS (A and B cabinets), and the right side for MPS units (Figure 56), or out the condenser box section of RoofPak units (Figure 57).

The retrofit kit includes a patch plate containing two watertight grommets pre-installed. There are several options for using this plate. If only one of the antennas is used, one of the two grommets can be removed from the patch plate and discarded (Figure 58).

In this case, only a single penetration will be made through the control enclosure. If two antennas are used, both grommets will remain in place, and two penetrations will be required. Alternatively, the grommets can be removed from the patch plate entirely and installed directly into the sheet metal of the control enclosure. Regardless of which method is used, it is important that silicone sealant be used to seal all penetrations. If two antennas are used, it is recommended to remove the grommets and use the patch plate as a template for marking the two penetration prior to drilling. When setting the patch plate as a template, use a carpenter square and level to ensure that the patch plate is aligned squarely with the unit control enclosure.

On the outside of the unit enclosure, drill a 7/8" hole using a step drill bit, centered from right to left, no more than 6" from the bottom of the stile. Drill no deeper than necessary to ensure the 7/8" hole is created. After doing this, a smaller diameter hole should be present on the inside of the enclosure. Again using the step drill bit, drill this hole on the inside of the enclosure to a 5/8" diameter. Drill no deeper than necessary to ensure the 5/8" hole is created. Install the provided 5/8" bushing (Figure 59) on the inside of the enclosure within the newly drilled hole. The bushing should snap into place on the sheet metal.

Install the patch plate on the outside of the enclosure, using the self-tapping sheet metal screws included in the hardware kit. Prior to installation, remove the protective plastic from the patch plate. Apply a bead of silicone sealant around the perimeter of the back side of the patch plate, ensuring that all potential points of moisture entry are covered. Once the plate is located as desired, press the grommet(s) into the 7/8" hole created previously. Again, use a carpenter square and level to ensure that the patch plate is aligned squarely with the unit control enclosure. The grommet(s) should snap into place on the sheet metal. Using the drill and nut driver, screw the patch plate in place using the four pre-drilled mounting holes (Figure 60).

Next, temporarily attach the antennas to the top of the air-handling unit, directly above the stile. The antenna’s coaxial cable is permanently affixed to the base, so the free end must be fed through the grommet (from outside inward) being careful to avoid sharp edges or pinch-points within the cabinet. Loosely coil the excess coaxial cable, until connected later during the installation procedure.
Wiring Interconnections

**DANGER**

Electric shock hazard. Can cause personal injury or equipment damage.

Prior to installing Intelligent Equipment hardware, power must be removed from the unit. This means removing power at the breaker panel serving the unit, and following proper lockout/tagout procedures at said breaker panel for the duration of the install. Power should not be reapplied until all electrical interconnections have been made and verified.

This equipment must be properly grounded. Connections and service to the MicroTech II WMC Water-Cooled chiller, MicroTech III Air cooled Chiller, MicroTech III Commercial Packaged Rooftop Unit Controller, Applied Packaged Rooftop, or Commercial Outdoor Air Handling Unit, Machine-to-Machine Gateway and Energy Management Module must be performed only by personnel knowledgeable in the operation of the equipment being controlled.

**CAUTION**

Static sensitive components. Can cause equipment damage.

Discharge any static electrical charge by touching the bare metal inside the control panel before performing any service work. Never unplug cables, circuit board terminal blocks, or power plugs while power is applied to the panel.

**M2M Gateway Connection to MTIII**

The Generation 1 M2M Gateway is connected to the MicroTech III unit controller using an Ethernet patch cable. Connect one end of the provided 6 ft. Ethernet Patch cable to the M2M port marked, “ETH”, and the other end to the MicroTech III Unit controller port marked, “TIP” (Figure 61).

For Generation 2 gateways, connect one end of the provided 6 ft. Ethernet Patch cable to the M2M port marked, “ETH1”, and the other end to the MicroTech III Unit controller port marked, “TIP” (Figure 62).

**Figure 61: ETH and TIP Ports (Generation 1 Gateway)**

![Figure 61: ETH and TIP Ports (Generation 1 Gateway)](image)

**Figure 62: ‘ETH1’ and ‘TIP’ Ports (Generation 2 Gateway)**

![Figure 62: ‘ETH1’ and ‘TIP’ Ports (Generation 2 Gateway)](image)
**M2M Gateway Connection to EMM**
*(Not on Gateway-on-the-Go, IE Express, or WMC kits)*

The Generation 1 M2M Gateway is connected to the EMM via USB. Connect the type-A end of the provided 3 ft. USB cable to the M2M Gateway port marked, “USB1”, and the type-B end of the same cable to the USB port of the EMM (Figure 63).

The Generation 2 M2M Gateway is also connected to the EMM via USB. Connect the type-A end of the provided 3 ft. USB cable to the M2M Gateway port marked, “USB 0” OR “USB 1”, and the type-B end of the same cable to the USB port of the EMM (Figure 64).

**Connection of Power Supply**

The Generation 1 M2M Gateway is powered by a 120VAC (primary) to 24VDC (secondary) power supply. The 24 VDC connection is made via a pre-fabricated, keyed plug coming from the low voltage end of the power supply. Connect this plug to the M2M Gateway receptacle marked, “Power Input” (Figure 65).

Generation 2 gateways use a slightly different power supply, which does not have the keyed plug on the 12 or 24 VDC connection. The VDC connection is made by wiring the power supply red wire to the gateway terminal marked, “PWR IN +”, and the power supply black wire to the gateway terminal marked, “PWR IN -” (Figure 66).
The 120VAC cable has the jacket and insulation pre-stripped, with the ends of both the Line and Neutral wires tinned. On a MicroTech III Rebel A and B units, connect the Line (brown) conductor to terminal TB1-1 and the Neutral (blue) conductor to terminal TB1-3 (Figure 67). On Rebel C units, connect the Line to TB3 300 and the Neutral to TB3 303.

On a MicroTech III Maverick II unit, connect the Line (brown) conductor to terminal TB1A-1, 2, 3, or 4 and the Neutral (blue) conductor to terminal TB1A-5, 6, 7, 8, or 9 (Figure 68).

On a MicroTech III RPS, RPR, RDT, RFS, RDS or RAH unit, connect the Line (brown) conductor to terminal TB1A-1, 2, 3, or 4, and the Neutral (blue) conductor to terminal TB1A-5, 6, 7, 8, or 9 (Figure 69).

**Figure 67: Typical MicroTech III Rebel A and B 120VAC Wiring**

![Figure 67](image)

**Figure 68: Typical MicroTech III Maverick II 120VAC Wiring**

![Figure 68](image)

**Figure 69: Typical MicroTech III RoofPak Unit 120VAC Wiring**

![Figure 69](image)
**Connection of EMM to CT’s**  
*(Not on Gateway-on-the-Go, IE Express, or WMC kits)*

The high voltage side of the EMM has a hinged cover, which must be opened. First, remove the two installation screws *(Figure 70)*, then flip the cover open. The EMM uses an open style hinge, so it may be easier to completely remove the hinged door while installing conductors.

The CT’s have built-in output conductors, which may need to be connected to the EMM. Insert the white conductor from the CT on Line 1 into the CT_A+ terminal, and the black conductor from the CT on Line 1 into the CT_A- terminal. Next, insert the white conductor from the CT on Line 2 into the CT_B+ terminal, and the black conductor from the CT on Line 2 into the CT_B- terminal. Finally, insert the white conductor from the CT on Line 3 into the CT_C+ terminal, and the black conductor from the CT on Line 3 into the CT_C- terminal. *(Figure 71).*

**Installing CT’s**  
*(Not on Gateway-on-the-Go, IE Express, or WMC kits)*

Current Transformers (CT’s) are split-core type, to make installation easier. Snap split-core CT connected to EMM terminal CT_A on phase L1, snap split-core CT connected to EMM terminal CT_B on phase L2, and snap split-core CT connected to EMM terminal CT_C on phase L3 *(Figure 72).* Ensure that the “Load” indicator on the CT is oriented correctly.

**Figure 72: CT Installation**

**Connection of EMM to Line Voltage**  
*(Not on Gateway-on-the-Go, IE Express, or WMC kits)*

The EMM is connected to Line Voltage through the Fuse Block pre-installed on the mounting bracket. Using the provided 6” wiring harness, connect the “VinA” (Tan), “VinB” (Orange), and “VinC” (Violet) terminals on the EMM to the “Load” terminals on the Fuse Block *(Figure 73).*

**Figure 73: EMM Connection to Fuse Block**
For DPS and MPS Units, use the provided 6 ft. wiring harness to connect the corresponding "Line" terminals on the Fuse Block to the control panel Power Block 1 (PB1) terminals “T1”, “T2”, and “T3”, such that EMM terminal “VinA” (Tan) is connected to PB1-T1, “VinB” (Orange) is connected to PB1-T2, and “VinC” (Violet) is connected to PB1-T3 (Figure 74).

For RoofPak Units, use the provided 6 ft. wiring harness to connect the “Line” terminals on the Fuse Block to the control panel Power Block 11 (PB11) terminals “T1”, “T2”, and “T3”, such that EMM terminal “VinA” (Tan) is connected to PB11-T1, “VinB” (Orange) is connected to PB11-T2, and “VinC” (Violet) is connected to PB11-T3 (Figure 75). Once all connections are made to the line voltage side of the EMM, close the hinged cover, and reinstall the screws. Figure 76 depicts an EMM with all high voltage terminations made and the hinged cover reinstalled.

**Figure 74: DPS and MPS Fuse Block Connected to Line Voltage**

**Figure 75: RoofPak Fuse Block Connection to Line Voltage**

**Figure 76: EMM Following Reinstallation of Hinged Cover**

**Connection of M2M Gateway and EMM to Ground**

Both the M2M Gateway and EMM arrive with their respective ground conductors connected at the device. In the case of the M2M Gateway, one end of the ground conductor is connected to the mounting bracket, while in the case of the EMM, one end of the ground conductor is connected to the “Safety” terminal on the EMM itself. For both the M2M Gateway and EMM, the “free” end of the ground conductor should be connected to the nearest available grounding lug in the control enclosure.
## Antenna Installation

**NOTE:** On Generation 2 Gateways using cellular, both of the provided antennas are used.

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Prior to installing Intelligent Equipment hardware, power must be removed from the unit. This means removing power at the breaker panel serving the unit, and following proper lockout/tagout procedures at said breaker panel for the duration of the install. Power should not be reapplied until all electrical interconnections have been made and verified.

This equipment must be properly grounded. Connections and service to the MicroTech II WMC Water Cooled chiller, MicroTech III Air Cooled Chiller, MicroTech III Commercial Packaged Rooftop Unit Controller, Commercial Packaged Rooftop, Applied Packaged Rooftop, or Commercial Outdoor Air Handling Unit, Machine-to-Machine Gateway and Energy Management Module must be performed only by personnel knowledgeable in the operation of the equipment being controlled.

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### Mounting

The antennas provided with the Intelligent Equipment solution (Figure 77) are omni-directional, and have a swiveling base. The antennas should be oriented to avoid interference from structures or other antennas. For initial installation, it is recommended to install the antennas on top of the rooftop unit, with enough clearance from the edge to avoid accidental contact or damage. The antenna is held in place by its magnetic base. More information about aiming antennas can be found in the sections, **Wi-Fi Configuration (Generation 1 Gateway)** on page 33 and **Troubleshooting** on page 53 of this document.

**Figure 77: Wireless Antenna on Magnetic Mounting Base**
Wiring of Antennas (If Applicable)

As described previously, the antenna cables must be fed from the outside of the unit through the control enclosure and up to the mounting bracket with the M2M Gateway. For a Generation 1 gateway, the connection is made by screwing the SMA coaxial connector onto the appropriate M2M SMA coaxial connector; “3G/GPRS” for cellular or “WLAN” for Wi-Fi. (Figure 78).

For a Generation 2 gateway, the cellular connection is made by screwing the SMA coaxial connector onto the appropriate M2M SMA coaxial connectors, “CELL MAIN” and “CELL DIV”. For Wi-Fi, the connection is made by screwing the antenna’s SMA coaxial connector onto the provided reverse polarity SMA adapter, then screwing the reverse polarity SMA adapter onto the “Wi-Fi/BT” connection on the gateway. (Figure 79).

LAN Installation (If Applicable)

LAN Connection

If using the local area network (LAN) for cloud connectivity on a Generation 1 gateway, a USB-to-Ethernet Adapter must be used. To complete the installation, connect the Ethernet patch cable from the network switch to the Ethernet end of the USB-to-Ethernet Adapter provided with the IE kit. Next, connect the USB end of the USB-to-Ethernet Adapter to the port labeled, “USB2”, on the M2M Gateway (Figure 80). NOTE: the M2M Gateway will not communicate with the cloud if the USB-to-Ethernet Adapter is connected to the incorrect USB port.

For LAN connection to the Generation 2 gateway, there is no need for a USB-to-Ethernet Adapter. To complete the installation, connect the Ethernet patch cable from the network switch to the port labeled, “Eth0”, on the Generation 2 gateway (Figure 81).

NOTE: The M2M Gateway will not communicate with the cloud if the LAN cable is connected to the incorrect Ethernet port on the gateway.
Wi-Fi Configuration (Generation 1 Gateway)

The following procedures should be used to configure the Intelligent Equipment solution for Wi-Fi connectivity.

NOTE: Wi-Fi is one of three possible methods of cloud connectivity. The method of connectivity is specified at the time of order. The gateway should be configured for Wi-Fi connectivity only if Wi-Fi was specified at the time of order. If unsure, contact the salesperson or Daikin Applied Controls Technical Response Center. Prior to configuring the gateway for Wi-Fi, please refer to Appendix A of this document for required IT information.

1. Mount and connect the antenna per the instructions included in document section, Antenna Installation on page 20.
2. Using a laptop computer and Ethernet cable, connect to the “ETH” port of the M2M Gateway (the Ethernet cable between the M2M Gateway and the MicroTech III controller must be temporarily disconnected, to make use of the “ETH” port on the M2M Gateway).
3. Navigate to the laptop’s Local Area Connection settings screen and change the IP subnet mask to 255.255.0.0, and set the IP address to be compatible with the default M2M Gateway IP address of https://172.31.255.1 (example compatible address: 172.31.255.7). For more information on how to change the computer’s IP settings, consult the Operating System’s “Help” files.
4. Temporarily disable the wireless adapter(s) on the computer, as these may prevent accessing the HTML Interface page.
5. Open a web browser page and type, https://172.31.255.1, then press enter.

NOTE: The browser will likely provide notification of a security risk related to an unsigned security certificate. This is expected, and does not indicate a gateway defect. Simply click the ‘advanced’ menu link within the browser, then accept the security exception.

   a. When prompted, enter the User Name: “service”
   b. Enter the unique password that was provided with the Gateway hardware and press ENTER.
   c. This opens the Gateway home page (Figure 82 on page 34). The System Information section of the Gateway home page will indicate that permission is denied. This is expected, and does not inhibit access to the functionalities required for properly configuring the gateway.
6. If the M2M Gateway will be using DHCP, skip to step 8. If the M2M Gateway will be using a Static IP address, go to step 7.
7. Click the ‘Network’ tab
   a. Under wlan0 Configuration (Figure 83), select ‘Static IP’ for Connection Type
   b. Enter the IP, Subnet, and Gateway address information
   c. Under wlan0 DNS Servers enter the primary DNS server and click ‘Add’
   d. If a secondary DNS server address is to be entered, enter it after the page has reloaded and click ‘Add’ and enter the secondary address or set ESSID Broadcast to ON.
   e. Click ‘Save’.
   f. Click ‘Apply Changes’
8. Click the ‘Wireless’ tab (Figure 84)
   a. Enter the ESSID of the network
   b. If Wi-Fi security is enabled enter in Wi-Fi network SSID and password and security type
9. Click the ‘Save Changes’ button in the lower right corner of the page. Then, click ‘Apply Changes’.
10. Click the System tab, then click the Reboot tab.
   a. Click the ‘Yes, really reboot now’ button
   b. The gateway will automatically refresh after several minutes.
11. Click the ‘Status’ tab
   a. Under ‘WLAN’, verify Wi-Fi signal strength (Figure 85).
12. Adjust antenna as necessary to establish a strong Wi-Fi connection
   a. For reliable operation, signal level should be 60 dBm or higher and link quality power should be 50/70 or higher.
   b. As the antenna is adjusted, be mindful that signal strength is impacted by structures or other antennas. As much as practically possible, make efforts to avoid such interference while adjusting the antenna.
13. Once a strong Wi-Fi connection is obtained, close the web browser, and disconnect the laptop and Ethernet cable from the M2M Gateway.

14. Reconnect the Ethernet cable between the M2M Gateway and the MicroTech III controller.

**NOTE:** Be certain that the IT staff has allowed incoming and outgoing Internet traffic on TCP ports 80, 443, 3197, 3199, 5222, 5223, 8080 and 8883.

IT Group must also create rules to allow access to the following:
- 8.8.8.8
- www.google.com
- iedata.daikinapplied.com
- Two or more of the following NTP servers:
  - us.pool.ntp.org
  - 0.pool.ntp.org
  - 1.pool.ntp.org
  - 2.pool.ntp.org
  - 3.pool.ntp.org
- daamachines.riptideio.com on port 8883
- iedata.daikinapplied.com on port 3199
- 52.176.101.12

It can take up to two hours for an initial push of all unit data to the cloud.
**Figure 84: Wireless Configuration Screen**

![Wireless Configuration Screen](image)

**Wireless Configuration**

<table>
<thead>
<tr>
<th>Network</th>
<th>Mode</th>
<th>ESSID Broadcast</th>
<th>RTS (Default off)</th>
<th>Fragmentation (Default off)</th>
<th>ESSID</th>
<th>Encryption Type</th>
<th>WIN 8/10</th>
</tr>
</thead>
</table>

- **Network**: On
- **Mode**: Client
- **ESSID**: Corp
- **Encryption Type**: WPA2

**Figure 85: Wireless Signal Strength**

![Wireless Signal Strength](image)

**WLAN0**
- **IP Address**: 10.150.1.53
- **MAC Address**: 02:9d:31:12:2a:00
- **IPv6 Address**: fe80::29d:31ff:fe31:2ad0/64
- **Received**: 470 pkts (32.3 KIB)
- **Transmitted**: 246 pkts (31.7 KIB)
- **MTU**: 1500

**WLAN**
- **ESSID**: Corp
- **Mode**: Managed
- **Frequency**: 2.437 GHz
- **Access Point**: 00:3a:99:33:87:31
- **Bit Rate**: 18 Mbps
- **Transmit Power**: 15 dBm
- **Retry**: 7
- **RTS**: off
- **Fragmentation**: off
- **Encryption Key**: off
- **Power Management**: Off
- **Link Quality**: 56/70
- **Signal Level**: -54 dBm

**Raw Information**

- **Show raw statistics**

---

**About Intelligent Device Platform**

**About Weeb**

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**Apply Changes**

- **Clear Changes**
- **Review Changes**
Wi-Fi Configuration (Generation 2 Gateway)

The following procedures should be used to configure the Intelligent Equipment solution for Wi-Fi connectivity.

**NOTE:** Wi-Fi is one of three possible methods of cloud connectivity. The method of connectivity is specified at the time of order. The M2M Gateway should only be configured for Wi-Fi connectivity if certain that Wi-Fi was specified at the time of order. If unsure, contact the salesperson or Daikin Applied Controls Technical Response Center. Prior to configuring the M2M Gateway for Wi-Fi, please refer to Appendix A of this document for required IT information.

1. Mount and connect the antenna per the instructions included in document section, *See Antenna Installation on page 20.*
2. Temporarily remove the factory-provided Ethernet patch cable from the “ETH1” port of the M2M Gateway. This cable will be reconnected when the configuration procedure is complete. NOTE: The opposite end of the factory-supplied Ethernet patch cable is connected to the unit controller, and this connection can remain in place during the configuration procedure.
3. Using a laptop computer and Ethernet patch cable, connect to the “ETH1” port of the M2M Gateway.
4. Navigate to the laptop's Local Area Connection settings screen and change the IP subnet mask to 255.255.255.0 and set the IP address to be compatible with the default M2M Gateway ETH1 IP address of 192.168.1.40 (example compatible address: 192.168.1.45). For more information on how to change the computer's IP settings, consult the Operating System's “Help” files.
5. Temporarily disable the wireless adapter(s) on the computer, as these may prevent accessing the Gateway Configuration User Interface.
6. Open a web browser page and type, **192.168.1.40:5050**, then press enter.
7. When prompted, enter the User Name: “service”, then enter the unique password that was provided with the M2M Gateway hardware and click ‘Sign In’ (Figure 86).
   a. If either the username or password is incorrect, a message displays to indicate the incorrect value (Figure 87 and Figure 88).
8. If the username and password are correct, the Gateway Configuration User Interface displays a message indicating the login is successful and shows the ‘Status’ screen (Figure 89).
9. The Gateway Configuration User Interface has three tabs, ‘Status’, ‘Diagnostics’, and ‘Network’, which provide information about the M2M Gateway (Figure 90).
   a. ‘Status’ indicates uptime, firmware, and memory information
   b. ‘Diagnostics’ indicates memory usage and data transmission information
   c. ‘Network’ indicates network settings and status.
10. Because it has not yet been configured to communicate on the network, the Wi-Fi connection will indicate, “No Connection Available” (Figure 91).
11. To configure the M2M Gateway Wi-Fi settings, click the ‘Configuration Settings’ link in the upper-right corner of the interface (Figure 92).
12. On the Wi-Fi tab of the Configuration screen (Figure 93), enter the following information provided by the facility IT Staff (refer to Appendix A of this document for required IT information):
   a. In the ‘Network Name’ field, enter the SSID (service set identifier).
   b. In the ‘Wireless Security’ field, select the appropriate security protocol for the wireless network.
   c. In the ‘Wireless Password’ field, enter the password for the wireless network.
   d. In the ‘Key Management’ field, enter the type of key management used by the network.
   e. If used, enter the correct settings for ‘Pairwise Ciphers’ and ‘Group Ciphers’.
13. Once all settings are entered, click the ‘Apply’ button at the bottom of the Wi-Fi tab.
14. Click the LAN tab of the Configuration screen (Figure 94).
15. If the M2M Gateway will use DHCP (Dynamic Host Configuration Protocol) for its network configuration parameters, select “DHCP” in the ‘Configure’ field, then click the ‘Apply’ button at the bottom of the LAN tab.

**NOTE:** With “DHCP” selected in the ‘Configure’ field, all other fields are disabled. Proceed to step 17.
16. If the M2M Gateway will use a Static IP Address, enter the following information provided by the facility IT Staff (refer to Appendix A of this document for required IT information):
   a. In the ‘Configure’ field, select “Static”.
   b. In the ‘IP Address’ field, enter the required device IP address.
   c. In the ‘Sub Mask’ field, enter the required network Subnet Mask.
   d. In the ‘Gateway’ field, enter the required network Gateway.
   e. If required by the network, enter the correct settings for ‘DNS Servers’ and ‘Search Domains’.

16. Once all settings are entered, click the ‘Apply’ button at the bottom of the LAN tab.

17. Click the ‘HOME’ link in the upper-left corner of the screen, then click the Network tab (Figure 95).
   a. Confirm the Wi-Fi icon in the middle of the screen indicates, “Connected”.
   b. Confirm the ‘Status’ under ‘Wireless Settings’ indicates, “OK”.

18. If 17a and 17b are true, click the ‘Logout’ link (Figure 96) in the upper-right corner of the screen, then close the computer’s browser. Disconnect the laptop computer and Ethernet cable used for the configuration procedure from the M2M Gateway and restore the laptop’s Local Area Connection settings to the previous values. Procedure complete.

19. If 17a and 17b are not true, repeats steps 5 thru 18. For further assistance, review the ‘Troubleshooting’ section of this document.

**NOTE:** Be certain that the IT staff has allowed incoming and outgoing Internet traffic on TCP ports 80, 443, 3197, 3199, 5222, 5223, 8080 and 8883. IT Group must also create rules to allow access to the following:

- 8.8.8.8
- www.google.com
- iedata.daikinapplied.com
- Two or more of the following NTP servers:
  - us.pool.ntp.org
  - 0.pool.ntp.org
  - 1.pool.ntp.org
  - 2.pool.ntp.org
  - 3.pool.ntp.org
- daamachines.riptideio.com on port 8883
- iedata.daikinapplied.com on port 3199
- 52.176.101.12

It can take up to two hours for an initial push of all unit data to the cloud.

**Figure 86: Login**

**Figure 87: Incorrect User ID**

**Figure 88: Incorrect Password**

Figure 86: Login

**Figure 87: Incorrect User ID**

**Figure 88: Incorrect Password**
**Figure 89: Login Successful**

![Login Successful](image)

**S Fairy, No Connection Available**

- **LAN**: Not Connected
- **WiFi**: Not Connected
- **Cell**: Not Connected

**Device Information**

- **Uptime**: 11:12:57 up 16 days, 1:36, 0 users, load average: 0.61, 0.69, 0.77
- **Firmware**: 4.9.57-eurotech-b
- **Total RAM**: 1020546 kB
- **Free RAM**: 53688 kB

**Figure 90: User Interface Tabs**

![User Interface Tabs](image)
**Figure 91: User Interface – No Connection**

SORRY, NO CONNECTION AVAILABLE.

**LAN**
No Connectivity

**WiFi**
No Connectivity

**Cell**
No Connectivity

**Figure 92: Configure Settings Icon**

Configuration Settings

**Figure 93: Wi-Fi Configuration**

[Screenshot of Wi-Fi Configuration interface]

Network Name
Wireless Security

Wireless Password
Key Management

Pairwise Ciphers
Group Ciphers

Apply

©2015 Daikin Applied
Figure 94: LAN Configuration

LAN Configuration

- **LAN No Connectivity**
- **WiFi No Connectivity**
- **Cell No Connectivity**

### LAN Configuration

- **Configure**
- **IP Address**
- **Sub Mask**
- **Gateway**
- **DNS Servers**
- **Search Domains**

**Apply**

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Figure 95: Connection Successful

Figure 96: Log Out

Logout
Ethernet LAN Configuration (Generation 1 Gateway)

**NOTE:** Ethernet LAN is one of three possible methods of cloud connectivity. The method of connectivity is specified at the time of order. The gateway should be configured for Ethernet LAN connectivity if Ethernet LAN was specified at the time of order. If unsure, contact the salesperson or Daikin Applied Controls Technical Response Center. Prior to configuring the gateway for Ethernet LAN, please refer to Appendix A of this document for required IT information.

The M2M Gateway is configured using a set of HTML interface pages within the Wind River Intelligent Device Platform. The table below identifies the Wind River configuration parameters, along with the corresponding physical port on the M2M Gateway. For reference, it also includes the corresponding device connection to the M2M Gateway.

<table>
<thead>
<tr>
<th>Wind River configuration parameter</th>
<th>M2M Gateway port</th>
<th>Device Connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAN</td>
<td>ETH (which is eth0)</td>
<td>MTIII Unit Controller</td>
</tr>
<tr>
<td>wan</td>
<td>USB2 (which is eth1)</td>
<td>Local Network</td>
</tr>
<tr>
<td>wlan0</td>
<td>WLAN</td>
<td>WiFi</td>
</tr>
<tr>
<td>wwan</td>
<td>3G/GPRS</td>
<td>Cellular</td>
</tr>
</tbody>
</table>

The following procedures should be used to configure the Intelligent Equipment solution for Ethernet LAN connectivity (**NOTE:** it is the "wan" interface in the gateway that will be configured).

1. Connect the USB-to-Ethernet adapter to USB2 on the M2M Gateway (this is necessary because the M2M Gateway has a single Ethernet plug, which is connected to the MicroTech III controller, and, therefore, unavailable for the purpose of connecting to the local network).
   a. Connect the provided Ethernet patch cable to the USB-to-Ethernet adapter and to the local network (DHCP is enabled by default).
2. Using a laptop computer and Ethernet cable, connect to the "ETH" port of the M2M Gateway (the Ethernet cable between the M2M Gateway and the MicroTech III controller must be temporarily disconnected, to make use of the "ETH" port on the M2M Gateway).
3. Navigate to the laptop's Local Area Connection settings screen and change the IP subnet mask to 255.255.0.0, and set the IP address to be compatible with the default M2M Gateway IP address of https://172.31.255.1 (example compatible address: 172.31.255.7). For more information on how to change the computer's IP settings, consult the Operating System's "Help" files.
4. Temporarily disable the wireless adapter(s) on the computer, as these may prevent accessing the HTML Interface page.
5. Open a web browser and type, https://172.31.255.1, then press enter.
   a. When prompted, enter the User Name: “service”.
   b. Enter the unique password that was provided with the Gateway hardware and press ENTER.
   c. This opens the Wind River Intelligent Device Platform configuration page in the gateway (Figure 97).
   **NOTE:** If DHCP will be used for the local network configuration, please proceed to step 8.
6. Click the ‘Network’ tab
7. Locate the ‘wan Configuration’ section (Figure 98 on page 44)
   a. Under wan Configuration select ‘Static IP’ for Connection Type
   b. Ensure that Interface = eth1
   c. Enter the IP, Subnet, and Gateway address information the customer’s IT provided. See Appendix on page 58.
   d. Under wan DNS Servers enter the network’s primary DNS server and click ‘Add’ (NOTE: If a public DNS server is preferred, use 8.8.8.8 or 4.2.2.2)
   e. If a secondary DNS server address is to be entered, enter it after the page has reloaded and click ‘Add’ and enter the secondary address.
8. Click the ‘Save Changes’ button in the lower right corner of the page. Then, click ‘Apply Changes’.
   a. **IMPORTANT:** Allow the page to refresh
   b. Confirm that there is a number in parentheses next to “Review Changes”. If so, proceed to step 9; if not, repeat steps 7 and 8.
9. Click the ‘Apply Changes’ button in the lower right-hand corner of the screen. The page will automatically refresh when complete (this can take up to two minutes).
10. Click the ‘Multiwan’ tab
    a. Scroll to the bottom of the page and Click ‘Add New Interface’ (Figure 99 on page 44)
    b. Name the interface, “wan” (must match the name of the interface configured in step 7.
    c. Click ‘Add new interface’
11. Once created, set “ICMP hosts” of new interface to “disable”

12. Under ‘Add New Interface to Monitor’, type “wan” in the ‘New Interface Name’ field (Figure 99). Then, click the ‘Add New Interface’ button.

**NOTE:** Creating the “wan” interface effectively breaks the cellular connection within the gateway’s configuration. If the Intelligent Equipment installation subsequently decides to switch to cellular for connectivity, then the “wan” interface will need to be deleted within the configuration screen.


14. Click ‘Save changes’ button
   a. **IMPORTANT:** Allow the page to refresh
   b. Confirm that there is number in parentheses next to “Review Changes”. If so, proceed to step 12; if not, repeat steps 10-14.

15. Remove ‘wwan’ interface

16. Remove ‘wlan0’ interface

17. Click the ‘Save Changes’ button
   a. **IMPORTANT:** Allow the page to refresh
   b. Confirm that there is number in parentheses next to “Review Changes”. If so, proceed to step 18; if not, repeat steps 10-17.

18. Click the ‘Apply Changes’ button in the lower right-hand corner of the screen. The page will automatically refresh when complete (this can take up to two minutes).

19. Confirm that ‘ICMP host’ of “wan” interface is still set to “disable”
   a. If so, go to step 20.
   b. If not, set to “disable”
   c. Click ‘Save changes’ button
      i. **IMPORTANT:** Allow the page to refresh
      ii. Confirm that there is number in parentheses next to “Review Changes”. If so, proceed to step 20; if not, repeat steps 10-19
   d. Click the ‘Apply Changes’ button in the lower right-hand corner of the screen. The page will automatically refresh when complete (this can take as much as two minutes).

20. Click the ‘System’ tab, then click the Reboot button.


**NOTE:** Be certain that the IT staff has allowed incoming and outgoing internet traffic on TCP ports 80, 443, 3197, 3199, 5222, 5223, 8080 and 8883.

IT Group must also create rules to allow access to the following:

- 8.8.8.8
- www.google.com
- iedata.daikinapplied.com
- Two or more of the following NTP servers:
  - us.pool.ntp.org
  - 0.pool.ntp.org
  - 1.pool.ntp.org
  - 2.pool.ntp.org
  - 3.pool.ntp.org
- daamachines.riptideio.com on port 8883
- iedata.daikinapplied.com on port 3199
- 52.176.101.12

It can take up to two hours for an initial push of all unit data to the cloud.

---

**Figure 97: M2M Gateway Home Page**
**Figure 98: WAN Configuration Settings**

### WIND RIVER Intelligent Device Platform

**Network Configuration**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Connection Type</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Interface Type</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Static IP</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Default Gateway</strong></td>
<td>192.168.2.1</td>
</tr>
<tr>
<td><strong>Netmask</strong></td>
<td>255.255.255.0</td>
</tr>
<tr>
<td><strong>IP Settings</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Wan DNS Servers**

- 8.8.8.8
- 4.2.2.2

Remove

**Add New Interface** Selection

**Monitor Configuration For wlan0**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health Interval</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>Health Fail Retries</strong></td>
<td>2</td>
</tr>
<tr>
<td><strong>ICMP Hosts</strong></td>
<td>disable</td>
</tr>
<tr>
<td><strong>DNS</strong></td>
<td>auto</td>
</tr>
</tbody>
</table>

**Add New Interface Name**

- wlan

Add New Interface
**Ethernet LAN Configuration (Generation 2 Gateway)**

The following procedures should be used to configure the Intelligent Equipment solution for Ethernet LAN connectivity.

**NOTE:** Ethernet LAN is one of three possible methods of cloud connectivity. The method of connectivity is specified at the time of order. The M2M Gateway should only be configured for Ethernet LAN connectivity if certain that Ethernet LAN was specified at the time of order. If unsure, contact the salesperson or Daikin Applied Controls Technical Response Center. Prior to configuring the M2M Gateway for Ethernet LAN, please refer to Appendix A of this document for required IT information.

1. Connect the Ethernet patch cable from the network switch to the port labeled, “ETH0”, on the M2M Gateway.
2. Temporarily remove the factory-provided Ethernet patch cable from the “ETH1” port of the M2M Gateway. This cable will be reconnected when the configuration procedure is complete. NOTE: The opposite end of the factory-supplied Ethernet patch cable is connected to the unit controller, and this connection can remain in place during the configuration procedure.
3. Using a laptop computer and Ethernet patch cable, connect to the “ETH1” port of the M2M Gateway.
4. Navigate to the laptop’s Local Area Connection settings screen and change the IP subnet mask to 255.255.255.0 and set the IP address to be compatible with the default M2M Gateway ETH1 IP address of 192.168.1.40 (example compatible address: 192.168.1.45). For more information on how to change the computer’s IP settings, consult the Operating System’s “Help” files.
5. Temporarily disable the wireless adapter(s) on the computer, as these may prevent accessing the Gateway Configuration User Interface.
6. Open a web browser page and type, 192.168.1.40:5050, then press enter.
7. When prompted, enter the User Name: “service”, then enter the unique password that was provided with the M2M Gateway hardware and click ‘Sign In’ (Figure 100).
   a. If either the username or password is incorrect, a message displays to indicate the incorrect value (Figures 101 and 102).
8. If the username and password are correct, the Gateway Configuration User Interface displays a message indicating the login is successful and shows the ‘Status’ screen (Figure 103).
   a. ‘Status’ indicates uptime, firmware, and memory information
   b. ‘Diagnostics’ indicates memory usage and data transmission information
   c. ‘Network’ indicates network settings and status.
10. Because it has not yet been configured to communicate on the network, the Ethernet LAN connection will indicate, “No Connection Available” (Figure 104).
11. To configure the M2M Gateway Ethernet LAN settings, click the ‘Configuration Settings’ link in the upper-right corner of the interface (Figure 105).
12. Click the LAN tab of the Configuration screen (Figure 106).
13. If the M2M Gateway will use DHCP (Dynamic Host Configuration Protocol) for its network configuration parameters, select “DHCP” in the ‘Configure’ field, then click the ‘Apply’ button at the bottom of the LAN tab.
   **NOTE:** With “DHCP” selected in the ‘Configure’ field, all other fields are disabled. Proceed to step 17.
14. If the M2M Gateway will use a Static IP Address, enter the following information provided by the facility IT Staff (refer to Appendix A of this document for required IT information):
   a. In the ‘Configure’ field, select “Static”.
   b. In the ‘IP Address’ field, enter the required device IP address.
   c. In the ‘Sub Mask’ field, enter the required network Subnet Mask.
   d. In the ‘Gateway’ field, enter the required network Gateway.
   e. If required by the network, enter the correct settings for ‘DNS Servers’ and ‘Search Domains’.
15. Once all settings are entered, click the ‘Apply’ button at the bottom of the LAN tab.
16. Click the ‘HOME’ link in the upper-left corner of the screen, then click the Network tab (Figure 107).
   a. Confirm the LAN icon in the middle of the screen indicates, “Connected”.
   b. Confirm the ‘Status’ under ‘Ethernet Settings’ indicates, “OK”.
17. If 17a and 17b are true, click the ‘Logout’ link (Figure 108) in the upper-right corner of the screen, then close the computer’s browser. Disconnect the laptop computer and Ethernet cable used for the configuration procedure from the M2M Gateway, reconnect the factory-supplied Ethernet patch cable to the “ETH1” port of the M2M Gateway, and restore the laptop’s Local Area Connection settings to the previous values. Procedure complete.

18. If 17a and 17b are not true, repeats steps 6 thru 18. For further assistance, review the ‘Troubleshooting’ section of this document.

**NOTE:** Be certain that the IT staff has allowed incoming and outgoing Internet traffic on TCP ports 80, 443, 3197, 3199, 5222, 5223, 8080 and 8883. IT Group must also create rules to allow access to the following:

- 8.8.8.8
- www.google.com
- iedata.daikinapplied.com
- Two or more of the following NTP servers:  
  - us.pool.ntp.org  
  - 0.pool.ntp.org  
  - 1.pool.ntp.org  
  - 2.pool.ntp.org  
  - 3.pool.ntp.org  
- daamachines.riptideio.com on port 8883  
- iedata.daikinapplied.com on port 3199  
- 52.176.101.12

It can take up to two hours for an initial push of all unit data to the cloud.

**Figure 100: Login**

```
ечина

Пароль

Войти
```

**Figure 101: Incorrect User ID**

```
 motivations

Пароль

Войти
```

**Figure 102: Incorrect Password**

```
 incorrect password

Пароль

Войти
```
**Figure 103: Login Successful**

Login Successful with: 'service'

**SORY, NO CONNECTION AVAILABLE.**

Device Information

- Uptime: 11:12:57 up 16 days, 1:36, 0 users, load average: 0.61, 0.66, 0.77
- Firmware: 4.9.57-eurotech-11
- Total RAM: 1020548 kB
- Free RAM: 85688 kB

**Figure 104: User Interface – Not Connected**

SORY, NO CONNECTION AVAILABLE.

LAN
No Connectivity

Wifi
No Connectivity

Cell
No Connectivity
Figure 105: Configure Settings Icon

Figure 106: LAN Configuration

Figure 107: Connection Successful

Figure 108: LAN Tab
Configuring the WMC HMI for Intelligent Equipment

In order for the WMC chiller to exchange data with the M2M gateway (Generation 1 or Generation 2), the API (Application Programming Interface) Server on the HMI (Human-Machine Interface) must be enabled. To enable the API Server:

1. Press the ‘Operator’ icon in the lower-right corner of the HMI (Figure 109).
2. Press the ‘API Server Enable’ field.
3. When prompted, enter the Technician-level password using the numeric keypad that appears on the HMI. Once the password is entered, press the ‘Enter’ button.
4. Pressing the ‘API Server Enable’ field again will open a drop-down menu. Select, “Enable,” from the list, then press the ‘Enter’ button to confirm the selection.
5. The ‘API Server Enable’ field on the HMI should now indicate, “Enabled” (Figure 110). Procedure complete.

---

Figure 109: The ‘Operator’ Icon

Figure 110: The ‘API Server Enable’ Field on the HMI
Commissioning the Gateway in the Cloud

NOTE: The Intelligent Equipment User Interface works best with Chrome and Firefox browsers. If using Internet Explorer, compatibility mode must be disabled in the browser, as it blocks key HTML 5 features of Intelligent Equipment. For instructions on disabling compatibility mode, please reference Internet Explorer’s help files.

In order for data to be populated on a unit’s detail pages in the cloud-based user interface, it must first be commissioned to the cloud application. To complete this process, first log into the Intelligent Equipment (IE) user interface at https://ie.daikinapplied.com (Figure 111). If you have not been given access to the unit gateway, please contact Daikin Applied. Once logged in, the user interface displays a building list and map of all assigned units (Figure 112). Under the ‘Buildings’ list (Figure 113), locate the building with the new unit and click the drop-down arrow (Figure 114). Locate the desired unit from the list and click the unit tag, which opens the unit details screen (Figure 115). Click the ‘Commissioning Procedure’ button. A message will display indicating that the commissioning procedure must be completed within 30 days (Figure 116). Clicking the ‘OK’ button opens the ‘Commissioning Procedures’ screen for the unit (Figure 117). Commissioning of the unit can be completed within IE or outside of IE (traditional paper form). Either method commissions the IE gateway in the cloud. If the unit will be commissioned outside of IE, simply click the checkbox for ‘Commission has been performed outside IE Application’, then navigate to the bottom of the ‘General’ tab and click, ‘Submit’. If using IE to commission the unit itself, complete all of the fields on each tab, then navigate to the bottom of the ‘General’ tab and click, ‘Submit’.

It can take up to 2 hours for all data to be pushed to the cloud and indexed. However, some data should begin to appear within 15 minutes. To check for connectivity, wait for 15 minutes, then navigate to each of the sections of the Unit Details screen and verify that some unit data has begun to appear. If no data is present, contact Daikin Applied for additional support.

Figure 111: Login
Figure 113: Buildings List

Figure 114: Unit List

Figure 115: Unit Details
Figure 116: Thirty Day Message

Commissioning

By clicking 'Ok' you will be provided 30 Days of access to the equipment through IE interface to support Startup and Commissioning of Unit AC-1. During this period you must submit the Commission procedure document otherwise Unit AC-1 reverts to a non-commissioned status and access will be limited.

Ok  Cancel

Figure 117: Commissioning Procedures Screen

Commissioning Procedures for AC-1

Before Start-up  Refrigeration System  Design Controls  Start-Up  Non Microtech Readings  Control Setpoints  Heat Recovery  General

Metric Units  English Units  Next

Commission has been performed outside IE Application

Commission Date

II. Pre Start-Up Checklist

Pre Start-Up Checklist, All NO checks require an explanation under "Description": Please check yes or no.

A. Is the unit free of visible shipping damage, corrosion or paint problems?

B. Is unit installed level?

C. Does the unit meet all location, installation and service clearances per IM Bulletin?

D. Has thermostat bulb been properly installed in the well?

E. Are all set screws on all pulleys, bearings, and fans tight?

F. Does electrical service correspond to unit nameplate?

Volts: Hertz: Phase:

G. Has electrical service been checked for proper phasing at each circuit power terminal block?
Cellular Signal Verification (Generation 1 Gateway)

The following procedures should be used to verify the cellular signal strength for the Intelligent Equipment gateway.

1. Mount and connect the cellular antenna per the instructions included in document section, Antenna Installation on page 20.

2. Using a laptop computer and Ethernet cable, connect to the “ETH” port of the M2M Gateway (the Ethernet cable between the M2M Gateway and the MicroTech III controller must be temporarily disconnected, to make use of the “ETH” port on the M2M Gateway).

3. Navigate to the laptop's Local Area Connection settings screen and change the IP subnet mask to 255.255.0.0, and set the IP address to be compatible with the default M2M Gateway IP address of https://172.31.255.1 (example compatible address: 172.31.255.7). For more information on how to change the computer’s IP settings, consult the Operating System’s “Help” files.

4. Temporarily disable the wireless adapter(s) on the computer, as these may prevent accessing the HTML Interface page.

5. Open a web browser page and type, https://172.31.255.1, then press enter.

NOTE: The browser will likely provide notification of a security risk related to an unsigned security certificate. This is expected, and does not indicate a gateway defect. Simply click the ‘advanced’ menu link within the browser, then accept the security exception.

   a. When prompted, enter the User Name: “service”

   b. Enter the unique password that was provided with the Gateway hardware and press ENTER.

   c. This opens the Gateway home page (Figure 118 on page 54). The System Information section of the Gateway home page will indicate that permission is denied. This is expected, and does not inhibit access to the functionalities required for properly configuring the gateway.

6. Click the ‘Status’ tab
   a. Select the ‘WWAN Modem’ tab
   b. Under “Signal Quality, verify cellular signal strength (Figure 119).

7. Adjust antenna as necessary to establish a strong cellular connection
   a. For reliable operation, signal quality and power should both be in the good or excellent range.
   b. As the antenna is adjusted, be mindful that signal strength is impacted by structures or other antennas. As much as practically possible, make efforts to avoid such interference while adjusting the antenna.

8. Once a strong cellular connection is obtained, close the web browser, and disconnect the Ethernet cable between the laptop and M2M Gateway.

9. Reconnect the Ethernet cable between the M2M Gateway and the MicroTech III controller.
Figure 118: M2M Gateway Home Page

Figure 119: Verify Cellular Signal Strength
Verify Time Zone Information  
*(If Needed on Generation 1 Gateway only)*

The M2M Gateway comes pre-configuration from the factory with the Time and Time Zone set based on the location of the installation site. However, during troubleshooting, the installer may need to confirm that the factory setting is accurate, and ensure that the correct information is also set in the MicroTech III unit controller.

1. Using a laptop computer and Ethernet cable, connect to the “ETH” port of the M2M Gateway (the Ethernet cable between the M2M Gateway and the MicroTech III controller must be temporary disconnected, to make use of the “ETH” port on the M2M Gateway).

2. Navigate to the laptop’s Local Area Connection settings screen and change the IP subnet mask to 255.255.0.0, and set the IP address to be compatible with the default M2M Gateway IP address of https://172.31.255.1 (example compatible address: 172.31.255.7). For more information on how to change the computer’s IP settings, consult the Operating System’s “Help” files.

3. Temporarily disable the wireless adapter(s) on the computer, as these may prevent accessing the HTML Interface page.

   a. When prompted, enter the User Name: “service”
   b. Enter the unique password that was provided with the Gateway hardware and press ENTER.
   c. This opens the Gateway home page.

5. Click the ‘System’ tab (Figure 120 on page 56).
   a. Select the ‘Settings’ tab
   b. Under ‘Time Zone’, verify that the indicated Time Zone is accurate. If so, continue to step 9.

6. If the Time Zone is inaccurate, use the list to select the correct Time Zone, then click, ‘Save Changes’.
   a. After saving changes, the screen will refresh.

7. Click, ‘Apply Changes’ to write the change to the Gateway’s configuration file.
   a. After applying changes, the screen will briefly indicate that the configuration is being updated, then will refresh to display the new time zone.

8. The time in the upper right corner of the webpage will now reflect accurately based on the selected Time Zone (Figure 121).

9. Once the Time Zone is verified in the M2M Gateway, you will verify the time in the MicroTech III unit controller. Begin by entering the password of 6363. Next, from the main menu of the unit controller (Figure 122), turn the knob clockwise until ‘View/Set Unit’ is highlighted, then depress the knob to enter the ‘View/Set Unit’ menu.
   a. Press in on the knob to enter the ‘View/Set Unit’ menu

10. From the ‘View/Set Unit’ menu, turn the knob clockwise until ‘Date/Time/Schedules’ is highlighted. Press the knob to enter the ‘Date/Time/Schedules’ menu. Verify that the ‘Time’, ‘Date’, and ‘UTC Diff’ (Figure 123) are all correct. If any require a change, simply use the knob to highlight that field, then press in on the knob to select, which makes the item adjustable. Use the knob to increase/decrease the value, then press in on the knob to enter

11. Once the ‘Time’, ‘Date’, and ‘UTC Diff’ are all correct, press the BACK button to return to the main menu.

**NOTE:** For more information on navigating the MicroTech III rooftop unit controller keypad display, please see the appropriate operation manual for the unit model.
**Troubleshooting**

**Figure 120: System Tab**

**WIND RIVER**

*Intelligent Device Platform 2.0*

![System Tab](image)

**System Settings**

- **Host Name**: Daikin_IE_1.2

**Time Settings**

- **Timezone**: CST
- **POSIX TZ String**: ECT
- **NTP Server**: 0.us.pool.ntp.org
  - **Port**: 123

**Webif® Settings**

- **Language**: English
- **Theme**: WindRiver

---

**Figure 121: Time Updated to Time Zone**

*Wind River Intelligent Device Platform 2.0*

- **Host**: WR-IntelligentDevice
- **Date**: 2014-06-19
- **Uptime**: 9 days, 23:12, 0 users
- **Time**: 14:34:25
- **Load**: 3.74, 3.22, 2.92

---

**Figure 122: Keypad Controls**

[Keypad Controls Image]

**Figure 123: Date/Time/Schedules Menu**

[Date/Time/Schedules Menu Image]
Potential issues:

Gateway does not power up (LED does not illuminate)
- Verify 120V at TB1 or TB3, depending on the unit
- Verify that power supply wires are properly installed to unit terminal block
- Verify that power supply is properly connected to the Gateway
- Contact Daikin Applied

Energy Management Module does not power up
- Verify USB cable connection to Gateway and Energy Management Module
- Verify that Gateway has power
- Contact Daikin Applied

Cell connection cannot be established
- Check antenna connection to magnetic base
- Check antenna connection to 3G/GPRS port on Generation 1 Gateway or CELL MAIN and CELL DIV ports on Generation 2 Gateway
- Confirm SIM card is fully seated in the gateway (Generation 1 Gateway only); this may require ejecting, then re-inserting the SIM card. See Figure 124 for SIM card location. The SIM Card is not field-serviceable in a Generation 2 Gateway and accessing it will void the product warranty.
- Check signal strength through Wind River interface (Generation 1 Gateway)
- Contact Daikin Applied

Wi-Fi connection cannot be established
- Check antenna connection to magnetic base
- Check antenna connection to WLAN port on Generation 1 Gateway or Wi-Fi/BT port on Generation 2 Gateway
- Check signal strength through Wind River interface (Generation 1 Gateway), or Gateway Configuration User Interface (Generation 2 Gateway)
- Verify Wi-Fi IP addressing, ESSID, and login credentials match customer supplied Wireless LAN requirements
- Connect to Wi-Fi network and try to ping the Gateway’s IP address to prove the Gateway is on the network.
- Contact Daikin Applied

LAN connection cannot be established
- Confirm proper installation of USB to Ethernet adapter
- Verify LED activity on USB to Ethernet adapter
- Verify LAN addressing through Wind River interface (Generation 1 Gateway) or Gateway Configuration User Interface (Generation 2 Gateway)
- Connect to LAN and try to ping the Gateway’s IP address to prove the Gateway is on the network
- Contact Daikin Applied

MicroTech III Data Not Showing Up In User Interface
- Confirm Ethernet cable is plugged into ‘ETH’ port on Generation 1 Gateway or ‘ETH1’ port on Generation 2 Gateway
- Confirm Ethernet cable is plugged into ‘TIP’ port on MicroTech III controller
- Check for LED activity on Gateway’s ‘ETH’ port (Generation 1 Gateway) or ‘ETH1’ port (Generation 2 Gateway)
- Verify IP address of Eth0 on the Generation 1 Gateway is 192.168.1.40
  — This is found at the Network/Networks/lan Configuration section of the Wind River interface (see Figure 84)
- Verify IP address of the MicroTech III controller is 192.168.1.42
  — View/Set Unit ——> Ctrlr IP Setup
- Contact Daikin Applied

Figure 124: SIM Card Location (Generation 1 Gateway)
Appendix A

Wi-Fi or Hardwired LAN Ethernet connection Pre-Start-up Form

NOTE: This form must be completed in collaboration with site IT staff prior to configuring the gateway for Wi-Fi or Hardwired LAN Ethernet connectivity. This form is not required for Cellular connectivity.

The Intelligent Equipment gateway is capable of communicating via cellular connection, Wi-Fi connection, or wired Ethernet LAN connection. For both Wi-Fi and wired Ethernet LAN, the gateway supports DHCP to have an IP address assigned automatically, or it can be field programmed with a static IP address.

If either Wi-Fi or wired Ethernet LAN is used for cloud connectivity, the customer’s LAN Administrator should review and supply the following information (as necessary) prior to a technician going to the jobsite and commissioning the gateway.

A CAT 5E Ethernet communication cable with an extra: [ ] feet of coiled cable and a RJ45 connector on the free end has been run per local codes from the customer’s LAN to the unit main control box of each unit with an Intelligent Equipment gateway.

1. IT Group must allow incoming and outgoing internet traffic on TCP ports 80, 443, 3197, 3199, 5222, 5223, 8080 and 8883.

2. IT Group must also create rules to allow access to the following:
   - 8.8.8.8
   - www.google.com
   - iedata.daikinapplied.com
   - Two or more of the following NTP servers:
     - us.pool.ntp.org
     - 0.pool.ntp.org
     - 1.pool.ntp.org
     - 2.pool.ntp.org
     - 3.pool.ntp.org
   - daamachines.riptideio.com on port 8883
   - iedata.daikinapplied.com on port 3199
   - 52.176.101.12

3. If the gateway will be required to use a static IP address the following information will need to be supplied:

   Internal LAN Static IP Address: [ ] [ ] [ ] [ ] (required)
   IP Subnet Mask: [ ] [ ] [ ] [ ] (required)
   Default Gateway: [ ] [ ] [ ] [ ] (required)
   DNS Server (primary): [ ] [ ] [ ] [ ] (required)
   DNS Server (secondary): [ ] [ ] [ ] [ ] (if applicable)
   Proxy Server IP Address: [ ] [ ] [ ] [ ] (if applicable)
   Proxy Server Port Number: [ ] [ ] [ ] [ ] (if applicable)
4. For Wi-Fi Ethernet connections the following information will be required as well:

<table>
<thead>
<tr>
<th>Wi-Fi network SSID:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wi-Fi network password:</td>
</tr>
<tr>
<td>Wi-Fi encryption type:</td>
</tr>
<tr>
<td>Wi-Fi Mode:</td>
</tr>
<tr>
<td>Preferred Wi-Fi channel:</td>
</tr>
</tbody>
</table>
Daikin Applied Training and Development

Now that you have made an investment in modern, efficient Daikin equipment, its care should be a high priority. For training information on all Daikin HVAC products, please visit us at www.DaikinApplied.com and click on Training, or call 540-248-9646 and ask for the Training Department.

Warranty

All Daikin equipment is sold pursuant to its standard terms and conditions of sale, including Limited Product Warranty. Consult your local Daikin Applied Representative for warranty details. To find your local Daikin Applied Representative, go to www.DaikinApplied.com.

Aftermarket Services

To find your local parts office, visit www.DaikinApplied.com or call 800-37PARTS (800-377-2787). To find your local service office, visit www.DaikinApplied.com or call 800-432-1342.

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