The tekmarNet® Gateway allows remote access to a tekmarNet® HVAC system. Users can view and change settings for each thermostat, including: temperature, heat/cool/auto, fan operation, relative humidity, schedules, and the away scene. In addition, the boiler system temperatures, firing rate, run times, and pump status can be viewed. All system data can be graphed on a chart or exported as a CSV file. Users are informed of errors and warnings through email or text notifications. The 486 includes three alert inputs that can be used to monitor auxiliary equipment.

This Operation Manual provides in-depth operation and troubleshooting details. For assistance, contact your local tekmar representative: https://www.watts.com/how-to-buy-sales-representative. Or call tekmar customer service at 1-800-438-3903.

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**Important Safety Information**

This is a safety-alert symbol. The safety alert symbol is shown alone or used with a signal word (DANGER, WARNING, or CAUTION), a pictorial and/or a safety message to identify hazards.

When you see this symbol alone or with a signal word on your equipment or in this Manual, be alert to the potential for death or serious personal injury.

This pictorial alerts you to electricity, electrocution, and shock hazards.

**WARNING**

This symbol identifies hazards which, if not avoided, could result in death or serious injury.

**CAUTION**

This symbol identifies hazards which, if not avoided, could result in minor or moderate injury.

**NOTICE**

This symbol identifies practices, actions, or failure to act which could result in property damage or damage to the equipment.

---

**WARNING**

To avoid serious personal injury and damage to the equipment:

- Do not use unless you know the safe and proper operation of this equipment.
- Improper installation and operation of this control could result in damage to the equipment and possibly even personal injury or death.
- This electronic control is not intended for use as a primary limit control. Other controls that are intended and certified as safety limits must be placed into the control circuit.

---

**NOTICE**

- Do not attempt to service the control. There are no user serviceable parts inside the control. Attempting to do so voids warranty.
- It is your responsibility to ensure that this control is safely installed according to all applicable codes and standards. tekmar is not responsible for damages resulting from improper installation and/or maintenance.

---

**WARNING**

Installation must be performed by qualified persons, in accordance with local codes, ANSI/NFPA 70 (NEC Article 424) and CEC Part 1 Section 62 where applicable. Prior to installation, please consult the local codes in order to understand what is acceptable. To the extent this information is not consistent with local codes, the local codes should be followed. Please be aware local codes may require this product and/or the control to be installed by an electrician.
Radio Frequency Interference

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Included in the Box

- tekmarNet® Gateway 486
- Wall plug power supply
- Screwdriver
- Installation and Operation Manual 486_D

Tools Required

- Phillips head screwdriver
- Needle-nose pliers
- Wire stripper

Materials Required

- Two conductor 18 AWG Low Voltage Thermostat LVT solid core wire
- Four wood screws

Networking Requirements

The 486 must connect to a router that is connected to a broadband Internet Service Provider. Cellular, satellite and dial-up Internet services may not have enough speed and are not recommended.

Web Browser Requirements

The 486 supports the latest versions of the following web browsers:

- Chrome
- Firefox
- Safari
- Edge

**NOTICE**

Internet Explorer 11 is not supported and an alternate web browser is required to access the tekmarNet web app.

Mobile App Requirements

The tekmarNet mobile app is available as a free download from the App Store® online store or Google Play™ store and is compatible with Apple® iOS version 12 and Android™ version 8.0 (Oreo) and later.

Apple and App Store are trademarks of Apple Inc., and Google Play and Android are trademarks of Google LLC.
The 486 has been tested to be compatible with the following tekmarNet products:

- tekmarNet® 4 Timer 033
- tekmarNet®4 Setpoint Control 161, 162
- Boiler Control 274, 275, 284
- tN2 Wiring Center 313, 314
- tN4 Wiring Center 315, 316
- Zone Expansion Module 324, 325, 326
- Zone Manager 334, 335, 336, 337
- Power Manager 345, 346
- tN2 House Control 400, 401, 402, 403, 406
- Boiler Reset Module 420
- Universal Reset Module 422, 423
- Mixing Expansion Module 440, 441, 444
- tN4 User Switch 479, 480, 481
- tekmarNet® Thermostat 532, 552, 553, 554, 557
- Snow Melt Control 654, 670

**Physical Dimensions**

**Front View**
- 6–5/8" (170 mm)
- 1/2" (14 mm)
- 1–7/8" (49 mm)
- 1/2" Knock-out (x 5 back) (x 5 bottom)

**Side View**
- 2–7/8" (72 mm)
- 7/8" (23 mm)
- 3/16" (5 mm)

**Mounting Base**
- 1/2" (13 mm)

**Installation Location**

When choosing the location for the control, consider the following:

- Interior wall.
- Keep dry. Avoid potential leakage onto the control.
- Relative humidity less than 90%. Non-condensing environment.
- No exposure to extreme temperatures beyond 32 to 122°F (0 to 50°C).
- Away from equipment, appliances, or other sources of electrical interference.

- Easy access for wiring, viewing.
- Approximately 5 feet (1.5 m) off the finished floor.
- The maximum length of wire is 500 feet (150 m).
- Strip wire to 3/8" (10 mm) for all terminal connections.
- Use standard 18 AWG wire.
- Ethernet cable maximum length is 328 feet (100 m).
- WiFi maximum distance is 100 feet (30 m) line of sight with no walls. Walls reduce WiFi range.
Mounting

Press down at the fingertip grips on top of the front cover and pull out and down.

Lift the front cover up and away from the control.

Loosen the screws at the front of the wiring cover.

The wiring cover pulls straight out from the wiring chamber.

Remove the safety dividers from the wiring chamber by pulling them straight out of their grooves.

Press the control release clip on the base inside the wiring chamber and slide the control upwards.

The control lifts up and away from the base.

The base is ready for mounting.

The control can be mounted on a standard DIN rail (sold separately, part M9303). First remove the control from its base and then, using the hooks and spring clip on the back of the control, mount it onto the DIN rail. This will be a popular option for those who prefer to mount the control inside a larger electrical panel.

The wiring can enter the bottom or the back of the enclosure. Knock-outs provided in the base allow the wiring to be run in conduit up to the enclosure. The base also has holes that line up with the mounting holes of most common electrical boxes.

Thermostat Addressing

Before connecting the tekmarNet® Gateway 486 to a tekmarNet® system, it is recommended that the system be fully completed, with no tekmarNet® thermostats or setpoint controls being added or removed at a later date. Also, each tekmarNet® thermostat and setpoint control device is automatically assigned a tekmarNet® address when connected to the system. It is recommended that each device be given a manual address. This address should be written down together with the room location for future reference.

The gateway records the address of each tekmarNet® thermostat and setpoint control. The mobile and web app allows the installer to name the room location and building area for each thermostat and setpoint control based upon it’s tekmarNet® address.
Wiring

**WARNING**

Disconnect all power before opening the control.

To prevent the risk of personal injury and/or death, make sure power is not applied to the product until it is fully installed and ready for final testing. All work must be done with power turned off to the circuit being worked on.

**tekmarNet® Bus**

The 486 includes four tekmarNet® bus inputs. The tN4 bus inputs allow communication between the 486 and the tekmarNet® system. Each tN4 bus on the tekmarNet® system must be wired to the tN4 bus inputs on the 486. The tN4 bus may be wired before or after the control is powered on and setup.

**Alert Inputs**

The 486 includes three alert inputs which trigger an error when the switch is closed or powered with 24 V (ac). The alert inputs can be used to monitor heating equipment for problems such as:

- Low water cut off
- Heating oil or propane tank low tank level
- Boiler flame failure lockout

**SD Card**

The 486 includes a SD Card. This is used to store historical data for graphing and error history. Removal of the SD card creates an error message and the 486 is unable to record or display historical information.

**Ethernet**

The 486 may be connected to a router using Ethernet using Category 5e cabling.

**Power**

The 486 includes a wall plug power supply with a 6 ft. cable.

- Connect the small round end into the power receptacle on the 486.
- Plug the wall plug into a 120 V (ac) power receptacle.
- The 486 display will turn on.
**NOTICE**

Requires the installation of tekmarNet thermostats with the Switching Relay or Zone Valve Control.
Wiring to Boiler Controls 274 and 275

For product literature:
Pour la documentation du produit:
Para la literatura del producto:
tekmarControls.com

Contains WiFi transceiver:
FCC ID: Z64-CC3100MODR1
Meets FCC Part 15B
IC: 4511-CC3100MODR1
Meets CAN ICES-3(B)/NMB-3(B)

Check product literature for a list of compatible tekmarNet products

Login at: Gateway.tekmarControls.com

tekmarNet® Gateway 486
Cloud Connectivity with Web & Mobile App

For maximum heat, press and hold Test button for 3 seconds.

Boiler Bus + Input 1 ✓
Bus 1 - Input 2 ✓
Bus 2 - Input 3 ✓
Bus 3 -

Date Code
H2048 B

Signal wiring must be rated at least 300 V.

Boiler Demand
DHW / Setpoint Demand
Proof Demand
Zone Load Shedding
Priority Override
EMS Input Signal

Boiler

Signal wiring must be rated at least 300 V.

Boiler Control 275
One tN4, Four Modulating Boiler & DHW / Setpoint

For product literature:
Pour la documentation du produit:
Para la literatura del producto:
tekmarControls.com

Contains WiFi transceiver:
FCC ID: Z64-CC3100MODR1
Meets FCC Part 15B
IC: 4511-CC3100MODR1
Meets CAN ICES-3(B)/NMB-3(B)

Check product literature for a list of compatible tekmarNet products

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tekmarNet® Gateway 486
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For maximum heat, press and hold Test button for 3 seconds.

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Bus 1 - Input 2 ✓
Bus 2 - Input 3 ✓
Bus 3 -

Date Code
H2048 B

Signal wiring must be rated at least 300 V.

Boiler Demand
DHW / Setpoint Demand
Proof Demand
Zone Load Shedding
Priority Override
EMS Input Signal

Boiler

Signal wiring must be rated at least 300 V.
Gateway User Interface

Home Screen

Cloud status | WiFi status | Date | Time
---|---|---|---
Internet | WiFi | May 30 | 6:00 PM

<table>
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<tr>
<th>tekmarNet</th>
<th>Alerts</th>
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<tr>
<td>Boiler Bus</td>
<td>Input 1</td>
</tr>
<tr>
<td>Bus 1</td>
<td>Input 2</td>
</tr>
<tr>
<td>Bus 2</td>
<td>Input 3</td>
</tr>
<tr>
<td>Bus 3</td>
<td></td>
</tr>
</tbody>
</table>

KonmarNet communication bus stats

Alert input status

Go to Menu Selection screen

Symbols

Connected to the cloud

Connected to WiFi

Disconnected from Cloud, WiFi or tekmarNet

Today’s date

Current time

Error

tN4 is connected

No Alert

Save and back to previous screen

Go to Menu Selection screen
The 486 has four settings menus: Internet, Time, tekmarNet, and Toolbox.

**Internet Menu**

<table>
<thead>
<tr>
<th>Setting</th>
<th>Range</th>
<th>Default</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network</td>
<td>Ethernet or WiFi</td>
<td>Ethernet</td>
<td>Always available</td>
</tr>
<tr>
<td>WiFi SSID</td>
<td>Scans for available WiFi SSIDs</td>
<td>Not applicable</td>
<td>Always available</td>
</tr>
<tr>
<td>Register</td>
<td>Provides 8-digit registration code</td>
<td>Not applicable</td>
<td>Always available</td>
</tr>
<tr>
<td>IP Address</td>
<td>0.0.0.0 to 255.255.255.255</td>
<td>192.168.1.2</td>
<td>Configure IP is set to Static, <strong>Installer</strong> access level</td>
</tr>
<tr>
<td>Subnet Mask</td>
<td>0.0.0.0 to 255.255.255.255</td>
<td>255.255.255.0</td>
<td>Configure IP is set to Static, <strong>Installer</strong> access level</td>
</tr>
<tr>
<td>Router</td>
<td>0.0.0.0 to 255.255.255.255</td>
<td>192.168.1.1</td>
<td>Configure IP is set to Static, <strong>Installer</strong> access level</td>
</tr>
<tr>
<td>DNS 1</td>
<td>0.0.0.0 to 255.255.255.255</td>
<td>8.8.8.8</td>
<td>Configure IP is set to Static, <strong>Installer</strong> access level</td>
</tr>
<tr>
<td>DNS 2</td>
<td>0.0.0.0 to 255.255.255.255</td>
<td>9.9.9.9</td>
<td>Configure IP is set to Static, <strong>Installer</strong> access level</td>
</tr>
<tr>
<td>Configure IP</td>
<td>DHCP or Static</td>
<td>DHCP (automatic)</td>
<td><strong>Installer</strong> access level</td>
</tr>
</tbody>
</table>
• The tekmarNet menu is only available when the 486 is set to **Installer** access level. Go to the Toolbox menu to change.

• The tekmarNet menu displays the number of devices (thermostats, setpoint controls, snow melt controls, boiler controls and timers) connected to each tekmarNet communication bus.

• Touching the Boiler Bus, Bus 1, Bus 2 or Bus 3 button displays a list of all potential 25 devices on the bus.

The bus menu displays the entire list of devices connected to the 486. The button turns blue when there is communication to the device. Touch an address Mstr (boiler control) or 1 through 24 to view the device information.

• This displays the boiler control’s information.

• Press “REMOVE” to remove the boiler control from the 486’s device list.

• This displays the thermostat’s information.

• Press “REMOVE” to remove the thermostat from the 486’s device list.
**Time Menu**

<table>
<thead>
<tr>
<th>Setting</th>
<th>Range</th>
<th>Default</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Setting</td>
<td>Auto or Manual</td>
<td>Auto</td>
<td>Always available</td>
</tr>
<tr>
<td>Time Format</td>
<td>12 or 24 hour</td>
<td>12 hr</td>
<td>Always available</td>
</tr>
<tr>
<td>Set Time</td>
<td>12:00 AM to 12:59 PM</td>
<td>Auto</td>
<td>Adjustable when Set Time is Manual</td>
</tr>
<tr>
<td>Set Date</td>
<td>Month, Day, Year</td>
<td>Auto</td>
<td>Adjustable when Set Time is Manual</td>
</tr>
<tr>
<td>Time Zone</td>
<td>Newfoundland, Atlantic, Eastern, Central, Mountain, Pacific, Alaska, Hawaii, Britain</td>
<td>Eastern</td>
<td>Always available</td>
</tr>
<tr>
<td>Daylight Savings</td>
<td>Off or On</td>
<td>On</td>
<td>Always available</td>
</tr>
</tbody>
</table>

**NOTICE**

Incorrectly setting the time and date manually may prevent the tekmarNet Gateway 486 from communicating to the web and mobile apps. Automatic time source is recommended when using an Internet connection.

**Toolbox Menu**

<table>
<thead>
<tr>
<th>Setting</th>
<th>Range</th>
<th>Default</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version</td>
<td>J1285A through Z</td>
<td>J1285A</td>
<td>Always available</td>
</tr>
<tr>
<td>Error History</td>
<td>List of errors</td>
<td>None</td>
<td>Always available</td>
</tr>
<tr>
<td>Access Level</td>
<td>User or Installer</td>
<td>User</td>
<td>Always available</td>
</tr>
<tr>
<td>Load Defaults</td>
<td>No or Yes</td>
<td>No</td>
<td>Installer access level</td>
</tr>
<tr>
<td>SD Card</td>
<td>0 to 8 GB</td>
<td>0 GB</td>
<td>Installer access level</td>
</tr>
<tr>
<td>Units</td>
<td>°F or °C (used in tekmarNet menu)</td>
<td>°F</td>
<td>Installer access level</td>
</tr>
</tbody>
</table>
Error Notification on Home Screen

- Alert symbol displayed when an error is present
- Press Alert button to view Error History

<table>
<thead>
<tr>
<th>tekmarNet</th>
<th>Alerts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiler Bus</td>
<td>Input 1</td>
</tr>
<tr>
<td>Bus 1</td>
<td>Input 2</td>
</tr>
<tr>
<td>Bus 2</td>
<td>Input 3</td>
</tr>
<tr>
<td>Bus 3</td>
<td></td>
</tr>
</tbody>
</table>

Error History in Toolbox Menu

- Clear error history
- Error message
- Time stamp when error occurred

<table>
<thead>
<tr>
<th>Type of error</th>
<th>tN4 Mixing Supply Sensor (b:31)</th>
</tr>
</thead>
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<tr>
<td>Errors on 486</td>
<td>May 30 09:20 AM</td>
</tr>
<tr>
<td>Cloud</td>
<td></td>
</tr>
<tr>
<td>Memory</td>
<td></td>
</tr>
<tr>
<td>Boiler Bus</td>
<td></td>
</tr>
<tr>
<td>Bus 1</td>
<td></td>
</tr>
<tr>
<td>Bus 2</td>
<td></td>
</tr>
<tr>
<td>Bus 3</td>
<td></td>
</tr>
<tr>
<td>Network</td>
<td></td>
</tr>
<tr>
<td>SD Card</td>
<td></td>
</tr>
<tr>
<td>Alert 1</td>
<td></td>
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<tr>
<td>Alert 2</td>
<td></td>
</tr>
<tr>
<td>Alert 3</td>
<td></td>
</tr>
<tr>
<td>System errors</td>
<td></td>
</tr>
<tr>
<td>tN4 - error on tekmarNet® system</td>
<td></td>
</tr>
</tbody>
</table>
tekmarNet Web and Mobile Apps

The tekmarNet Gateway 486 supports both mobile and web apps. The web app includes all the functionality of the mobile app plus the following:

- Building location map
- Thermostat floor plan
- Hydronic system control schematic
- Alert input error message configuration

**tekmarNet Start Page**

To view and adjust the WiFi Thermostat using a computer web browser, go to [https://Gateway.tekmarControls.com](https://Gateway.tekmarControls.com).

Download the tekmarNet mobile app from the App Store or Google Play.

**Create a New Account**

Press the Sign Up button to create a new account.

Enter the email address that you wish to use to login.

**NOTICE**

After entering your email address, press the “Send verification code” button. An email will be sent to your account with a validation code. Enter this validation code into the Sign Up screen. The validation code protects your account from unauthorized access.

Once the email validation is complete, then enter your password, first and last names, and country of residence. Then press the Create button to finish creating your account.
On the Start page, press the Sign In button. Enter your email address and password to login.

If you forget your password, the Sign In page has a password recovery option. An email will be sent to your account. Click on the link to create a new password.
• Press the button to add a new building.
• When you first log in, there will usually be no buildings linked to your account. The exception is when a building administrator shares building access through an email.
• Each tekmarNet Gateway 486 represents a building on the web or mobile app.
• When you Add a Building, your account becomes the building Administrator.
• The building Administrator can share access to other user accounts by sending an invitation email. See Adding Users section.

Each building requires the following information: building name, address, unit or suite number, state or province, country and ZIP or Postal Code.

• Enter the 8-digit registration code from the tekmarNet Gateway 486. From the Home screen, press the Gear symbol, then press Internet button, then the Registration button.
• On the web or mobile app, press the Add Building button.
Each building is displayed on the screen as a tile with the building name, address and status. If there are no active errors the status is Ok ✓. When an error condition is present, an Alert ⚠️ is displayed.

In Map view, the location of each building is displayed as a location pin📍 on a map.

• The Administrator can edit the building information by clicking the building name tab (web) or the pencil 🖊 (mobile).
• The Administrator, Installer and User can remove a building from their account.
• A default building can be selected. Select “Default Building” or “Make this my default location.”
Access Levels

Registering a tekmarNet Gateway 486 to your account makes you the building Administrator. The Administrator can share access to a building to other users through an invitation email. Two access levels are available: Installer, and User. Once the invitee creates an account, the invitee account is listed on the Administrator’s Users page. For privacy reasons, invitees are unable to view the other accounts with access to the building.

Building Users

- If you are the Administrator, the menu bar will show a User tab. Press the User tab to view a list of all the users.
- To invite a user to a building, press the user-plus button.
- In the tile lower left corner, if the Envelope symbol is blue, then the account receives error notifications by email.
- If the Comment symbol is blue, then the account receives error notifications by text message.

Adding a User

- To invite other users, the Administrator enters the invitee’s email address, selects either Installer or User access level permissions, and can select to share access to one or more buildings.
Edit or Remove a User from a Building

- The Administrator can remove users from a building.
- To remove a user, go to Users, click on a users tile, and then click the Remove User button.

Editing My Account Settings

- The My Account settings allow users to change their mobile phone number, preferred temperature units between °F or °C, and select email and/or text message notifications.
- Users can change their first and last names and their country of residence by clicking the Update Profile button.
Thermostat List

- Each thermostat is listed as a tile, with the thermostat name, temperature and mode (heat, cool, auto, off).
- The information is orange when the HVAC equipment is heating, blue when cooling and gray when off.
- The outdoor air temperature and current local time is displayed in black.
- The scene can be changed from this screen. Select scenes 1 through 8 to change all the thermostat preset temperatures.
- Click on a thermostat tile to view and adjust the thermostat setting.

Thermostat Floor Plan

- Each thermostat name and temperature is listed on the floor plan.
- The installer can upload up to three floor plans. Use the floor plan drop down menu to select the desired floor plan.
- To setup the floor plan, click the Gear button.

Edit Thermostat Floor Plan

- For each thermostat, click the Add Zone button, select the thermostat name, then click on the floor plan where you wish to overlay the thermostat name and temperature.
Thermostat Temperature

• The thermostat temperature is shown in the center of the horseshoe slider.
• Adjust the thermostat temperature by adjusting the orange (heating) or blue (cooling) circles.
• The current mode (heat, cool, off, auto) is shown in orange. To change, click on the desired mode.

Thermostat Floor Temperature

• Click the floor heat button to adjust the floor heating temperature (only available for radiant floor heating with a floor sensor).

Thermostat Relative Humidity

• Click the water drop button to adjust the humidity min and max settings (only available on select thermostat models).
Thermostat Fan

- Click the fan 🌬️ button to adjust the fan.
- Fan adjustment is between Off or Auto, or between Off, 10 to 90%, Auto depending on thermostat model and configuration.

Thermostat Settings

- Click the ⬆️ button to view the thermostat model, tekmarNet address and change the thermostat name.

Thermostat Schedule

- Click the 📅 button to view and adjust the thermostat schedule.
- The schedule can have 2 or 4 events (temperature changes) per day and repeat either every day (24 hour) or weekly (7-day).
Thermostat Graphing

• Click the chart-line button to graph the thermostat data.
• Select the time range to be hourly, daily, or monthly.
• Click Show to graph temperatures and setpoints.
• Click on the line color legend to show or hide the line on the graph.
• Click Export to download a CSV format data file which can be opened in a spreadsheet.

Hydronic System Overview

• The system information displayed is dependent on the hydronic control's model and configuration.

Hydronic System Schematic

• The system information displayed is dependent on the hydronic control's model and configuration.
Hydronic System Settings

• Click the 📊 button to view the hydronic control's model number and software version.

Hydronic System Control Graphing

• Click the ⬇️ button to graph the hydronic system data.
• Select the time range to be hourly, daily, or monthly.
• Click Show to graph temperatures and setpoints.
• Click on the line color legend to show or hide the line on the graph.
• Click Export to download a CSV format data file which can be opened in a spreadsheet.
## Error Message History

- Errors and warnings are shown together with a time stamp.
- Click the trash can button to clear all error messages.
- Click the error or warning for detailed description.
- When an error occurs, a notification is sent by email and/or text message to the building’s user accounts.

### Error Message Description

**Boiler Supply Sensor Open Circuit**

Due to an open circuit, the control failed to read the boiler supply sensor. The control no longer controls the boiler. Instead, the control provides a boiler enable to the boiler’s auxiliaries or boiler control until the sensor is repaired. The control will not operate the boiler contact if the Bal Minimum setting is less than 100°F (38.0°C). Locate and repair the problem as described in the Data Brochure D 070. The error message self clears once the error condition is corrected. Note: On some Universal Reset Controls, the boiler supply sensor can be removed intentionally. In this case, set the boiler sensor location setting to return, then power down for 10 seconds then restart the control.

- Follow the instructions on how to clear the error.

### Custom Error Message for Alert Inputs

- The tekmarNet Gateway 486 includes three alert inputs to monitor equipment in the boiler room.
- Create a custom notification message that is sent by email or text message when the alert input is activated.
Troubleshooting FAQ

**Issue:** I am unable to sign in using my email address.
**Answer:** Check to see if your mobile phone or computer is connected to the Internet.

**Issue:** I have a WiFi connection but the 486 is not connected to the Cloud.
**Answer:** Check the router to determine if it has an Internet connection. Also check that the router is not blocking outbound ports 123 (NTP), 4040 (TLS) or 53 (DNS).

**Issue:** I am creating a new account and the verification code is not working.
**Answer:** The verification code must be used within 30 minutes or it expires. Please restart the sign up process.

**Issue:** I am adding a new building and the 8-digit registration code is not working.
**Answer:** The registration code must be used within 60 minutes or it expires. Go to the tekmarNet Gateway 486 Internet menu and obtain a new registration code.

**Issue:** I am unable to view the list of building users.
**Answer:** Only the administrator may view the list of building users and invite other users.

**Issue:** I have an administrator account for a building. How do I transfer administrative access level privileges to another account?
**Answer:** The tekmarNet Gateway 486 must be deregistered. This requires physical access to the 486. Once deregistered, the 486 may be registered to the new administrator’s account.

**Issue:** What is the maximum number of buildings that can be registered to an account?
**Answer:** There is no limitation on the number of buildings that can be registered to a user’s account.

**Issue:** I have added a user but they are not listed on the Users page.
**Answer:** The invitee must sign up and create an account before they will appear in the Users list.

**Issue:** I made changes to a Setpoint Control 161 and 162 and the information is not up to date on the web or mobile app.
**Answer:** Unlike newer thermostats, the Setpoint Control 161 and 162 do not automatically report changes to the 486. The 486 must find changes by polling the 161 and 162. It may require up to 10 minutes to update the information.
## Technical Data

**tekmarNet Gateway 486 Cloud Connectivity with Web & Mobile App**

<table>
<thead>
<tr>
<th>Literature</th>
<th>Submittal 486_C, Installation &amp; Operation Manual 486_D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaged weight</td>
<td>2.9 lb. (1300 g)</td>
</tr>
<tr>
<td>Enclosure</td>
<td>Blue PVC plastic, NEMA type 1</td>
</tr>
<tr>
<td>Dimensions</td>
<td>6-5/8” H x 7-9/16” W x 2-13/16” D (170 x 193 x 72 mm)</td>
</tr>
<tr>
<td>Display</td>
<td>3.5” color touchscreen</td>
</tr>
<tr>
<td>Approvals</td>
<td>Meets Class B: ICES &amp; FCC Part 15, CE</td>
</tr>
<tr>
<td>Ambient conditions</td>
<td>Indoor use only, 32 to 122°F (0 to 50°C), &lt; 90% RH non-condensing</td>
</tr>
<tr>
<td>Power supply</td>
<td>100–240 V(ac) input, 5 V (dc) regulated output, 1 A, center positive, Class 2, FCC certified, CSA or UL listed</td>
</tr>
<tr>
<td>Alert inputs</td>
<td>Short, 0 - 30 V (ac)</td>
</tr>
<tr>
<td>Ethernet</td>
<td>10/100BASE-T</td>
</tr>
<tr>
<td>WiFi</td>
<td>WiFi 802.11n, 2.4 GHz, WPA2 encryption</td>
</tr>
<tr>
<td>Mobile app</td>
<td>Apple® iOS 12 or higher, Android™ 8 or higher</td>
</tr>
<tr>
<td>Warranty</td>
<td>3 Year Limited Warranty</td>
</tr>
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</table>
Limited Warranty

The liability of tekmar under this warranty is limited. The Purchaser, by taking receipt of any tekmar product (“Product”), acknowledges the terms of the Limited Warranty in effect at the time of such Product sale and acknowledges that it has read and understands same.

The tekmar Limited Warranty to the Purchaser on the Products sold hereunder is a manufacturer’s pass-through warranty which the Purchaser is authorized to pass through to its customers. Under the Limited Warranty, each tekmar Product is warranted against defects in workmanship and materials if the Product is installed and used in compliance with tekmar’s instructions, ordinary wear and tear excepted. The pass-through warranty period is for a period of twenty-four (24) months from the production date if the Product is not installed during that period, or twelve (12) months from the documented date of installation if installed within twenty-four (24) months from the production date.

The liability of tekmar under the Limited Warranty shall be limited to, at tekmar’s sole discretion: the cost of parts and labor provided by tekmar to repair defects in materials and / or workmanship of the defective product; or to the exchange of the defective product for a warranty replacement product; or to the granting of credit limited to the original cost of the defective product, and such repair, exchange or credit shall be the sole remedy available from tekmar, and, without limiting the foregoing in any way, tekmar is not responsible, in contract, tort or strict product liability, for any other losses, costs, expenses, inconveniences, or damages, whether direct, indirect, special, secondary, incidental or consequential, arising from ownership or use of the product, or from defects in workmanship or materials, including any liability for fundamental breach of contract.

The pass-through Limited Warranty applies only to those defective Products returned to tekmar during the warranty period. This Limited Warranty does not cover the cost of the parts or labor to remove or transport the defective Product, or to reinstall the repaired or replacement Product, all such costs and expenses being subject to Purchaser’s agreement and warranty with its customers.

Any representations or warranties about the Products made by Purchaser to its customers which are different from or in excess of the tekmar Limited Warranty are the Purchaser’s sole responsibility and obligation. Purchaser shall indemnify and hold tekmar harmless from and against any and all claims, liabilities and damages of any kind or nature which arise out of or are related to any such representations or warranties by Purchaser to its customers.

The pass-through Limited Warranty does not apply if the returned Product has been damaged by negligence by persons other than tekmar, accident, fire, Act of God, abuse or misuse; or has been damaged by modifications, alterations or attachments made subsequent to purchase which have not been authorized by tekmar; or if the Product was not installed in compliance with tekmar’s instructions and / or the local codes and ordinances; or if due to defective installation of the Product; or if the Product was not used in compliance with tekmar’s instructions.

This Warranty is in Lieu of All Other Warranties, Express or Implied, Which the Governing Law Allows Parties to Contractually Exclude, Including, Without Limitation, Implied Warranties of Merchantability and Fitness for a Particular Purpose, Durability or Description of the Product, Its Non-Infringement of Any Relevant Patents or Trademarks, and Its Compliance With or Non-Violation of Any Applicable Environmental, Health or Safety Legislation; The Term of Any Other Warranty Not Hereby Contractually Excluded Is Limited Such That It Shall Not Extend Beyond Twenty-Four (24) Months From the Production Date, To the Extent That Such Limitation Is Allowed by the Governing Law.

Product Warranty Return Procedure

All Products that are believed to have defects in workmanship or materials must be returned, together with a written description of the defect, to the tekmar Representative assigned to the territory in which such Product is located. If tekmar receives an inquiry from someone other than a tekmar Representative, including an inquiry from Purchaser (if not a tekmar Representative) or Purchaser’s customers, regarding a potential warranty claim, tekmar’s sole obligation shall be to provide the address and other contact information regarding the appropriate Representative.

Need help? Go to our website or contact us.
tekMarControls.com | tekmar.customerservice@wattswater.com | 1-800-438-3903