



**Viking SCADA Web
App Manual**

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Get Started

Welcome to Viking SCADA Web App

Using the Viking SCADA Web App, you can remotely track the readings from oilfield, water and other industry areas in a variety of ways. For example, gather the data from your sites, check if measurements are within the expected ranges and immediately get alerts or warnings in case they're not.

Viking SCADA Web App streamlines your workflow by:

- Saving the efforts and cost spent on taking the readings manually
- Avoiding the errors and imprecision – you get the data straight from the source at specified increments
- Notifying about any alarming event instantly via call, email, messages

It is a simple and efficient tool with intuitive interface and lots of easy-to-configure customizable settings to bring the most value for your company's needs.

This guide will walk you through the process of getting the data from your instrumentation, from configuring your company's settings to performance checks on a specific sensor. You'll most likely configure the settings once, and then just tweak them when needed. When you've connected data from your sensors, you can tailor the notifications to calls, email, or messages.

Key Tasks & Features

Explore the basics of Viking SCADA Web App in a nutshell. Get started quick and easy, or use the hyperlinks to learn more about the specific feature or setting.

Setting Up Your Company in Viking SCADA App

1. Sign up and register your company.
See the [Sign Up for a New Account](#) for the instruction.
2. Configure the connection to the gateways that the sensors of your devices use to send the readings.
For the detailed steps and sequence of what you'll need to set up, see [Configure Your Company in Viking SCADA App](#).
3. Define what data will be imported and processed from your sensors and configure whom and how to notify in case of any alerts.
4. Specify your personnel and their roles.
Refer to [Add Users and Specify Their Roles](#) to learn more about delegating the responsibilities.
5. Select and purchase a monthly subscription plan.

There might be some tweaks and altering that will need your attention, but the majority of them can be assigned to managers and automated further.

Visualizing and Monitoring

Track the status of your sensors, check if the readings of devices in your facility are within the expected ranges, and get statistical reports. This includes:

- **Customizable Dashboards** — Collect and organize the data exactly as you need it. For each site, you can create up to 3 dashboards with unlimited tracking capacity.
- **Multipurpose Monitoring Widgets** — Gather real-time data from your devices, track the location of heavy equipment or assets, check the status of relays, get daily and monthly statistics.
- **Handling Issues** — Define the acceptable ranges for readings and get immediate warning alerts if they're exceeded.
- **Tailored Alarm Messages** — Assign your personnel to be notified via voice, email and SMS in case of any issues.
- **Prioritized Notification Acknowledgments** — Tailor alarm calls for different shifts and weekends. If any issue is detected, the system will call the users sequentially, automatically rolling to next responders if there is no acknowledgement
- **Issue Reports** — Admin can review all alarm events, such as alarms firing or being acknowledged.

Traffic Use and Pricing

With Viking SCADA Web App, there are no complicated upfront or deployment costs. You simply buy a monthly plan servicing for the amount of traffic used for sending the information from your connected RV50 gateways into application.

The pricing plans are available for any budget and needs. Explore them at <https://vikingscada.com/purchase>.

Select the one that meets your demands or contact our support to request a specific plan.

Create Account and Navigate the App

To start using Viking SCADA web app, you have to create the company account. This section covers the sign-up process and logging in for the first time. Here you can also learn how the data is organized and stored within the app, and what settings you can find on each page.

Sign Up for a New Account

When you launch the Viking SCADA web app, you're automatically directed to a **Log In** page.

To create a new account, click the **Sign Up** link below the **Log In** button. This will direct you to the Sign Up page where you can provide the information necessary to register your company in the app. The sign-up details are divided into two sections:

- **Client Details** – Here you provide information to fill your profile with. This information will be used for confirming your registration, logging into the application, and receiving invoices.
- **Company Details** – Here you provide information to register your company. This information will be necessary to verify your company upon signup.

▼ All fields must be filled to proceed with registration. Please make sure you enter the correct data.

After providing the sign-up details, please read the End User License Agreement. When you finish reading, return to the sign-up page and select the **I Accept the End User License Agreement** check box. Then click **Register Company** to submit the form.

Upon submitting, the 6-digit verification code will be sent to your provided phone number and you'll be directed to the verification page. Enter this code in the **Code** field and click **Verify**.

▼ After you complete the registration, please allow up to 24 hours to process and confirm your account. The Viking SCADA features will not be available until the account is verified and approved by the system.

After You Sign Up

When you sign up the company for Viking SCADA, you are assigned with the **Admin** role. This means that you have the administrator rights and can perform operations available only for your role such as adding other users, connecting your sites and devices, and specifying alerts.

Refer to the [Add Users and Specify Their Roles](#) for more details.

When your company is approved in the Viking SCADA system, you can log in and begin setting all the necessary settings.

Learn more about what you can configure in [Configure Your Company in Viking SCADA App](#) section.

Navigate in the App

The app launches at My Profile home page. At the left you will see the links for navigating to major features of Viking SCADA web app. You can also use top navigation bar across the top. From left to right, it features:

- Viking SCADA logo button which directs you to the **Home** screen.
- Stream status, where you can see when new readings are received. Admin can also see the number of megabytes (**MB**) available for use.
- Purchase button that leads to **Purchase** page.
- Profile icon that expands with dynamic navigation.

Home Screen

When you log in to Viking SCADA, the first thing you see is the Home screen.


Available for the following account types:

[Admin](#), [Managers](#), [Viewers](#)

Use the left-hand Navigation to select the page you want to proceed to.

- ▼ You can also click the profile icon at the upper-right corner and select the page from the dynamic navigation menu.

To navigate to the home screen from other parts of interface, click:

- Home () icon
- Viking SCADA logo at the upper-left
- Trail at the top of the page content

My Company

This page contains details and settings in the associated tabs.

Available for the following account types:

[Admin](#), [Managers](#), [Viewers](#)

The level of access and details depends on the account type. For example, Admin can access and edit all of the settings whereas Viewers can only review the information about the site they're assigned to.

When you click My Company, you will see the **Company Details** tab. Click the tab's title to launch it.

Company Details

Here the details about the company are stored. Admin user can edit them and also select the alarm setting per account type. For example, send email to all Viewers of the Site.

For details, see [Set Up Notifications](#).

Sites

Here all sites that you've connected and track are located. Click the site's name to see associated dashboards. Click the dashboard to see the assessments (Widgets) connected to its sensors. For configuration and available settings, refer to [Monitor Your Devices](#) section.

Admin can add, edit, and remove sites including configuration of the gateways, devices, and sensors. To learn more, see [Configure Your Sites](#).

Managers

This tab lists all Manager account types of your company.

▼ Only Admin can create **Manager** accounts.

Viewers

This tab lists all Manager account types of your company.

▼ Admin and Managers can create **Viewer** accounts.

My Settings

Here you can change your personal information such as credentials and contact information.

Available for the following account types:

[Admin](#), [Managers](#), [Viewers](#)

Edit the field you want to change. To set a new password, click the **Change Password** button and specify new password in the pop-up menu.

▼ Changing email will also update your log-in email.

▼ If you change your phone number, you'll have to verify a new number by entering a verification code sent to the new number.

Click the **Save Changes** button to update your profile.

Manage My Account

This page contains information about transactions of your account.

Available for the following account types:

[Admin](#)

Using this page, you can review all of the traffic purchases of your company including their type, status, cost, and more. To view the transactions of a specific type, select it from the **Choose type** drop-down.

Click **Get invoice** to proceed to the [Invoice](#) page.

Reports

Here all events that generated alarms are logged.

Available for the following account types:

[Admin](#)

You can review them in the app or save the Excel file to your PC by clicking the **Download** button.

Use the date selection settings to view the report for a specified period.

Notifications

This page allows to control alarm acknowledges. This includes changing the sequence of sending the alarm call and status of each user.

Available for the following account types:

[Admin](#)

Purchase


This page contains payments available to purchase the traffic for connecting the app to your devices. To launch this page, click the **Purchase** button.

Available for the following account types:

[Admin](#)

To learn more about pricing and billing, see the [Select a Payment Plan](#) section.

Invoice Contextual Page

This page launches when you click Get invoice on the associated row in the [Manage My Account](#) page's grid. Click the **Print** () icon to launch default print settings of your computer.

Available for the following account types:

[Admin](#)

Configure Your Company in Viking SCADA App

To add tracking capabilities to devices that your company uses, you need to define and connect these devices first. This section covers the settings you can set up for your company.

Here is configuration workflow for connecting your equipment.

1. Add sites that will be monitored.
2. Configure the RV50 hardware and establish the gateway for tracking data.
3. Connect the devices attached to a gateway.
4. Specify the sensors for each connected device.

At this stage, you'll also most likely want to create accounts for the personnel and assign them to the site. You can also set the alarm settings. This includes sending instant alarm emails, messages to the assigned personnel and confirming notification acknowledgments via receiving a call.

Add and Configure Your Sites

Sites generally refer to the location and type of a facility where a number of devices is located. When you add a site, you can connect it to available RV50 gateways that in turn are linked to the devices and particular sensors to monitor.

Add a Site

1. On the **Company View** page, select the **Sites** tab.
If you are using other parts of the interface, from the **Home** screen, in the navigation, click **Sites**.
2. Click the **+ Site** button to launch **New Site** page.
3. Enter or paste how to name the facility in the **Name** field and indicate the place in the **Location** field.
You will later use the provided name to assign **Manager** accounts to this site. You can also filter and search the sites by name and location.
4. From the **Type** drop-down, select the type of facility.
5. Click **Save Site**.
This will update the Sites tab with a new site and reveal further actions applicable.

As you add sites, they will be stored in the **Sites** tab. You can either add and configure each site sequentially, or add all your sites first, and then configure each of them.

Actions Applicable to Site

When viewing **Sites** tab, for each site the following icon settings are available. Click the icon from the **Actions** column to:



Dashboards

View dashboards associated with this site. You can also click the site name.

▼ You can configure up to 3 dashboards per site. See [Get to Know Dashboards](#) to learn more.



Edit

Configure settings for gateway, devices, and sensors designated to the site. You can also update the information about the site. You can learn more in the following topics.



Delete

Remove the site and its configuration including dashboards, gateways, devices, sensors, and users assignments associated with this site.

Add a Gateway and Connect It to Your RV50 Gateway

After adding a site, you can populate it with gateways and establish their connection with the RV50 hardware gateway. This connection will provide the Viking SCADA with data directly from your equipment.

▼ Before you start adding gateways, add at least one **Site**.

Add a Gateway in Viking SCADA

To add a gateway in the Viking SCADA, follow these steps:

1. On the **Company View** page, select the **Sites** tab.
If you are using other parts of the interface, from the **Home** screen, in the navigation, click **Sites**.
2. Choose the site from the list and click **Edit** (✎) button.
This will launch the site configuration page with each component settings stored in their tabs.
3. Select the **Gateway** tab and click the **+ Add Gateway** button to launch **Add Gateway** menu.
4. In the **Enter gateway name** field, provide a name for the gateway.
You will connect the devices to this gateway using the provided name. You can also search for the gateway by its name.
5. In the **Enter gateway description** field, optionally add relevant information.
6. Click **Create**.

This will update the **Gateways** tab with a new gateway and reveal further actions applicable.

After you create the gateway, the associated firmware file with **.tar** extension will be automatically downloaded to your computer. The created gateway will be stored in the **Gateways** tab with **pending** status. After this you'll have to connect RV50 to this gateway using the provided **.tar** file.

Install the Gateway in ACEmanager to Connect to RV50

To connect the Viking SCADA with your RV50 gateway, follow these steps:

1. Connect your computer to the RV50 using Ethernet cable or micro USB to USB cable.

2. Depending on the connection type, launch your preferred browser and access your **ACEmanager** by entering or pasting:
 - For Ethernet connection, <http://192.168.13.31:9191> IP address.
 - For USB-based connection, <http://192.168.14.31:9191> IP address.
3. Log in to your account and select the **Applications** tab.

▼ Make sure that your ALEOS Software version is **4.9.3** or higher. The version is displayed at the bottom of the page before the copyright.

4. If **ALEOS Application Framework**, **Serial Port Reserved**, or **QCOM DM Port Resource Reserve** settings are not enabled, enable them (1). To update the page with changes, click **Refresh**.
5. Click the **Choose File** button, browse your computer and select the **.tar** firmware file generated by Viking SCADA, and then click **Install AAF Application** (2).
If the Choose File option does not appear, click **Reboot**. Upon reboot, please log in again to proceed.

The screenshot shows the 'Applications' tab in the Viking SCADA web interface. The top navigation bar includes tabs for Status, WAN/Cellular, LAN, VPN, Security, Services, Location, Events Reporting, Serial, Applications (selected), I/O, and Admin. The main content area is divided into a left sidebar and a main panel. The sidebar lists 'Data Usage Slot 1', 'Data Usage Slot 2', 'Garmin', and 'ALEOS Application Framework' (highlighted in red). The main panel has a 'Last updated time : 12/6/2018 5:07:43 PM' and buttons for 'Expand All', 'Apply', 'Refresh', and 'Cancel'. Under the '[-] General' section, there are settings for 'Available RAM (KB)' (198158), 'Available Flash (KB)' (222687), and 'CPU Load (last 15 minutes)'. Below these are three settings: 'ALEOS Application Framework' (Enable), 'Serial Port Reserved' (Enable), and 'QCOM DM Port Resource Reserve' (Enable), all with dropdown menus and a red box labeled '1' around them. Under the '[-] AAF Applications' section, there is a table with columns 'Application Name', 'Autostart', 'Version', 'Status', and 'Actions'. The table contains one entry: 'Viking_Scada_RV50' with 'Autostart' set to 'true', 'Version' '0.0.2.5', and 'Status' 'started'. The 'Actions' column for this entry has 'Stop' and 'Uninstall' buttons, with a red box labeled '3' around the row. Below the table is a 'Choose File' button (with 'No file chosen' text) and an 'Install AAF Application' button, with a red box labeled '2' around the 'Install AAF Application' button.

After your gateway is connected and able to receive data from the RV50, it appears in the application list with the available actions (3).

In the **Gateways** tab in Viking SCADA the status of the gateway changes to **connected**.

Actions Applicable to Gateways


For each gateway, you can click the icon in the **Actions** column to:



Edit

Launch the **Edit Gateway** menu and change the provided name or description.


Upon updating, you'll need to save the new firmware file and connect it to RV50 again. In this case, uninstall the previously connected gateway before installing a new one.

-  **Delete** Remove the gateway from Viking SCADA. This will disconnect all associated devices and sensors, so you'll need to update or delete them.

Add and Connect Devices



Device refers to **Programmable Logic Controller (PLC)** or **Remote Terminal Unit (RTU)** connected to your RV50 gateway that supports Modbus communication protocol. Typically, this refers to RFSCADA Data Delivery Devices.

▼ Before you start adding your devices, add at least one **Gateway**.

1. On the **Company View** page, select the **Sites** tab.
If you are using other parts of the interface, from the **Home** screen, in the navigation, click **Sites**.
2. Choose the site from the list and click **Edit** () button. This will launch the site configuration page. The settings for each component are stored in their tabs.
3. Select the **Devices** tab and click the **+ Add Device** button to launch **Add Device** menu.
4. In the **Name** field, enter a name for the device.
You will connect the sensors to this device using the provided name. You can also search for the device by its name.
5. In the **Serial Number** field, enter a serial number of the device.
6. In the **Software Version** field, enter the PLC software version.
7. In the **Modbus ID** field, enter the ID assigned to the device in your network.
For correct connection, make sure you provide IDs as they are arranged in the Modbus network connected to RV50.
8. In the **Location** field, enter where this device is located (on your site or in the device network configuration).
9. From the **Gateway** drop-down, select the gateway the device is connected to.
You can later select to view devices connected to a specific gateway.
10. Click **Create**.
This will update the **Devices** tab with a new device and reveal further applicable actions.

Actions Applicable to Devices

For each device, you can click the icon in the **Actions** column to:

-  **Edit** Launch the **Edit Device** menu and modify the configuration. Please be careful with changing Modbus ID and Gateway. If these do not correspond to the actual network arrangement, this may lead to receiving data errors.
-  **Delete** Remove the device from Viking SCADA. This will disconnect all associated sensors, so you'll need to update or delete them.

Add and Connect Sensors

Sensor refers to any type of device, module or device's subsystem that detects changes in the measured property and send the information about such events.

▼ Before you start adding sensors, add at least one **Device**.

1. On the **Company View** page, select the **Sites** tab.
If you are using other parts of the interface, from the **Home** screen, in the navigation, click **Sites**.
2. Choose the site from the list and click **Edit** (✎) button. This will launch the site configuration page. The settings for each component are stored in their tabs.
3. Select the **Sensors** tab and click the **+ Add Sensor** button to launch **Add Sensor** menu.
4. In the **Name** field, enter a name of the sensor. For example, *FS-D Component Sensor*.
You will need this name to create a monitoring widget for this sensor.
5. In the **Tag Name** field, enter a type of the sensor such as Switcher, Timer, Counter, etc.
6. From the **Modbus Register Type** drop-down, select a type to register the sensor in the Viking SCADA.
7. In the **Modbus Register Address** field, enter the ID assigned to the sensor in your device.

▼ The ID must be unique to the device.

8. From the **Modbus Data Type** drop-down, select integer.
9. In the **Modbus Data Size (Bytes)** field, enter a size of data transmitted from the sensor at a time. Typically, the size is 2 bytes.
10. In the **Sampling Interval (ms)** field, enter the interval at which the app will get response from the sensor in milliseconds.
The minimum acceptable value is 30000 ms.
11. In the **Value Multiplier** field, specify a factor for converting the PLC raw values to the desired units of measure. To learn how the data is converted for your device, refer to its manual.
12. In the **Units** field, enter the units to output the data with (after applying the **Value Multiplier**).
13. From the **Device** drop-down, select the device the sensor is connected to.
You can later filter the sensors by the device.
14. In the **Bit Mask** field, if you are connecting a sensor with digital discrete output, you can enter the bit mask to use for its components. The mask is entered as a list of values starting from 0. Use comma to separate values. For example, *0,1,2,3*.
Refer to your device's manual to learn what masks can be applied to its sensors.
15. Click **Create**.

This will update the **Devices** tab with a new device and reveal further applicable actions.

Actions Applicable to Sensors

For each device, you can click the icon in the **Actions** column to:



Edit

Launch the **Edit Sensor** menu and modify the configuration. Please be careful with changing Device and Modbus Register Address. If these do not correspond to the actual device configuration, this may lead to receiving data errors.



Delete

Remove the sensor. All associated widgets will be also turned off.

Add Users and Specify Their Roles

User roles define what parts of the interface and functionality the users can access and what tasks they can perform. To enable a user to access Viking SCADA web app, you must add the user to your company.

You can learn what permissions are granted to different user roles, how to add, edit and remove users from your company in the following topics.

Before Creating New Users

Here are general requirements for configuring the users of a company:

- The **Admin** account is created automatically when you create the company account.
- All **Manager** user accounts are created and assigned their role by the **Admin**.
- Both **Admin** and **Manager** can create **Viewer** user accounts.
- All non-admin accounts must be appointed to a **Site** during their creation.

▼ Before you start adding users, add at least one **Site**.

User Roles and Permissions

The available roles performed by team are **Admin**, **Managers**, and **Viewers**.

Role	Permissions
Admin	<ul style="list-style-type: none"> • Access all Viking SCADA functionality • Configure any sites, gateways, devices, and sensors • Create Manager and Viewer accounts and their status • Assign users to a particular site • Specify dashboards, notifications, and alarms • Review and download reports • Manage company's account • Change profile settings of all users • Purchase Viking SCADA services
Managers	<ul style="list-style-type: none"> • Access parts of Viking SCADA interface See Navigate the App for details.

	<ul style="list-style-type: none"> • Edit the assigned site, its gateways, devices, and sensors, and dashboards • View Manager and Viewer accounts • Create Viewers, change their status, and appoint them to a site • Change profile settings for them and Viewers • View all company sites' dashboards
<p>Viewers</p>	<ul style="list-style-type: none"> • Accessing parts of Viking SCADA interface See Navigate the App for details. • View the Manager and Viewer accounts of their associated site • View the associated site and its dashboards

Adding a Manager

To create a Manager account, follow these steps:

1. Log in to Viking SCADA as **Admin**.
2. From the left-hand navigation links, select **Managers**.
This launches your **Company View** on the **Managers** tab.
3. Click the **+ Manager** button.
This launches New Manager page.
4. Provide the necessary information including credentials, password, contact information, and site assignment.

▼ You must add a site before assigning users to it.

▼ You can assign up to 8 non-admin user accounts with up to 3 **Manager** accounts to each site. For example, 3 Managers and 5 Viewers; 2 Managers and 6 Viewers; 1 Manager and 7 Viewers.

5. Click **Save Manager**.

This will register a new Manager account. When the user will later log in, they can change their personal information but not their assignment.

After the Manager is added to your company, the record with their name, email, site assignment, creation date, status, and applicable actions appears in the **Managers** tab.

Adding a Viewer

To create a Manager account, follow these steps:

1. Log in to Viking SCADA as **Admin** or **Manager**.
2. From the left-hand navigation links, select **Viewers**.
This launches your **Company View** on the **Viewers** tab.

- Click the **+ Viewer** button.
This launches New Viewer page.
- Provide the necessary information including credentials, password, contact information, and site assignment.

▼ You must add a site before assigning users to it. If creating a **Viewer** from a **Manager** account, Managers can select only the site they're appointed to.

▼ You can assign up to 8 non-admin user accounts with up to 3 **Manager** accounts to each site. For example, 3 Managers and 5 Viewers; 2 Managers and 6 Viewers; 1 Manager and 7 Viewers.

- Click **Save Manager**.

This will register a new **Viewer** account. When the user will later log in, they can change their personal information but not their assignment.

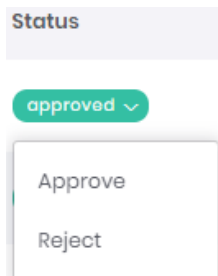
Sorting and Searching Users

Double-click the column title to sort the list by the user creation date (**Date**) or email (**Email**). The arrow button will appear next to the title showing in what order – ascending or descending – the list is sorted.

User Status

After **Manager** or **Viewer** accounts are added, they are automatically added to the list with **approved** status.

The status defines whether the user can log in and access Viking SCADA functionality available for their role. Click the status drop-down to change it:



Changing the status to **rejected** is useful when you want to persist the information, assignment, or both but restrict the user from accessing the Viking SCADA app and receiving alerts and notifications. For example, if the employee is on vacation or you'll later edit the user credentials to appoint a new user to existing assignments.

Editing and Removing Users

For each user in the list, you can click the icon in the **Actions** column to:



Edit

Launch the **Edit Manager** or **Edit Viewer** page and update their personal information, assignment, or both.

**Delete**

Remove the user from your company. All associated assignments will be also removed.

Set Up Alarm Notifications

Alarm notifications feature is the essential benefit of constant monitoring of your company's facility. When the tracked sensor values go beyond the selected ranges, alarms notify the right personnel at once to prevent any issues and not cause downtime.

What Events Trigger Alarms?

Viking SCADA includes a number of real-time monitoring functionality that automatically detects any issues and deviation from the expected results. If such event occurs, the application notifies the assigned users what sensor caused a problem.

To learn about configuring widgets and setting up expected ranges of the results, see [Configure Monitoring Using Widgets](#).

Configuring Alarms

To specify the alerting settings for users of your company, go to the

1. Log in to Viking SCADA as **Admin**.
6. From the left-hand navigation links, select **Alarms**.
This launches the on the **Message** tab.

Select Who Will Receive Message Alarms

When an alarm event occurs, you can select the check box settings to send email and SMS messages that convey the source of the event to Admin, Managers, Viewers that are assigned to the site, or all aforementioned.

Configure Call Acknowledgments and Hierarchy

When things go wrong, extra minutes can make a significant difference. To ensure the alert reaches the personnel, Viking SCADA sends a call that needs to be not only received but also acknowledged. This will notify responsible personnel sequentially until the notification is acknowledged.

That is why all users are automatically added to the voice acknowledgment list. You can change the acknowledgement sequence and status of the users.

To adjust the user's position in the alarm hierarchy, on the **Alarms** page, select the **Voice** tab and use **Up** (^) and **Down** (v) arrow buttons to raise or lower the user in the sequence.

You can also disable voice calling for particular users by changing their status in the **Actions** column drop-down. For example, if one of the **Manager** users is on vacation.

Specify How to Monitor Your Devices

To facilitate the monitoring and get the exact data you need from specific sensors, you can add dashboards and fill them with sensor widgets. You can select to monitor and visualize data in a variety of ways, track location, check state of discrete sensors, and get statistical reports about your readings.

Using Viking SCADA to constantly monitor the environment of your facility, you can receive actionable information directly from real-time data and keep your facility at peak performance. Set up expected data range for the sensors and be instantly in case of deviations.

The topics in this section cover the things you need to configure, such as the following:

- Adding dashboards to a site
- Specify widgets for a dashboard
- Reviewing alarm events

Get to Know Dashboards

Dashboards gather a set of widgets you configured for a site to give you at-a-glance overview of the tracked data. Using dashboard, you can set up the monitoring tailored to specific sensor readings. Dashboards are easy to create, update and share.

Before Creating Dashboards and Adding Widgets

Learn about general principles and rules of configuring the dashboards:

- Dashboards are created per site and can contain widgets that stream and track performance of sensors which belong to this site's devices.
- You can create up to 3 dashboards for each site.
- Each dashboard can include unlimited number of widgets.
- Some widgets such as **Switch** can be set up for specific sensors only.
- **Admin** user can configure (create, edit, and remove) dashboards and widgets for any site.
- **Managers** can configure dashboards and widgets for the site they're assigned to and view the dashboards of other sites.
- **Viewers** can view dashboards of the site they're assigned to.

▼ Before you start setting up dashboards, add at least one **Site**.

Adding Dashboard

Assuming you have already added a site, follow these steps:

1. On the **Company View** page, select the **Sites** tab.
If you are using other parts of the interface, from the **Home** screen, in the navigation, click **Sites**.
2. Choose the site from the list and:

- Click the site name
- Click **Dashboards** (📊) button.

This will launch the **Dashboards** page.

3. Click **+ Add Dashboard** button.
4. In the pop-up menu, enter a name for your dashboard and then click **Save**.

This will update the **Dashboards** page with a new empty dashboard and reveal further applicable actions.

Setting Up the Dashboard

To launch the **Dashboard** contextual page where you can add, edit, and remove sensor widgets for the dashboard, click the dashboard name.

Dashboards have two interaction modes:

- **Review** – Displays the widgets that are already running. All user roles that have access to the site can view dashboards in this mode. No changes can be made in this mode.
- **Edit** – Allows modifying the dashboard, including its layout and widget configurations. This mode is available for **Admin** and **Managers** that are assigned to the site.

To enable this mode, click **Pin Dashboard** (📌) button. In the Edit mode, you can also change the dashboard layout by using drag-and-drop, and change the size of included widgets.

To save the updates you made in the Edit mode and return to the Review mode, click **Accept Changes** (✅) button.

Once you set up the dashboard and fill it with widgets, the streaming will begin at the intervals you have specified for each sensor. This allows to detect events that might require attention and response at a moment's notice and send specified alerts to the assigned users.

Actions Applicable to Dashboards

For each dashboard, you can click the icon in the **Actions** column to:



Edit

Edit the dashboard name.



Delete

Remove the dashboard. All associated widgets will be also removed.

Configure Monitoring Using Widgets


After you create a dashboard, you can set up what readings it will track and how to process and visualize the data. For each sensor, you can configure one or more widgets.

Here's what you can do using widgets:

- Collect and process readings from sensors including real-time values, location and relay state

- Specify full and normal range for input data for real-time monitoring
- Define limits which will trigger warning and danger alerts for real-time monitoring
- Gather daily and monthly statistics on alerting events per sensor

Adding Widgets

When you launch **Dashboard** page, it opens in the review mode. To enable the edit mode in which you can add, edit, and remove widgets, click the **Pin Dashboard**  button at the lower-right corner of the page. This will reveal two action buttons:



Add Widget

Open left-hand **Widgets** pane with a list of available widgets. Click the widget to add it on your dashboard and configure its settings in the **Widget Configuration** pane.



Accept Changes

Confirm the configuration changes and save the updated dashboard layout. This will exit the edit mode and return you in the review mode.

Selecting and Configuring a Widget

When you click **Add Widget** button, you can select the widget from the **Widgets** pane. Click the widget name to add it to your dashboard and open **Widget Configuration** panel.

General Widget Settings

For any widget you configure, you need to specify:

Name	In the Name field, provide the name to use when displaying this widget on the dashboard.
Sensor	In the Sensor field, type in the sensor to bind this widget to. As you start typing, available sensors will appear below the field allowing you to select the one you need from the list.

Real-Time Monitoring Widgets and Settings

Widgets of this type monitor and process readings the moment the data is received from the connected sensor and can immediately trigger alarm events.

Widgets for Analog Output Sensors

The majority of their settings is similar and used to define the sensitivity and limits that will trigger the alarm notifications:

Range:

Normal max: Limit max:

Danger:

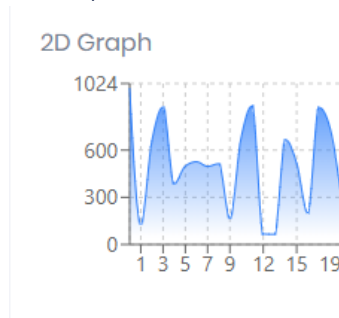
<p>Range</p>	<p>In the minimum (left) and maximum (right) fields, provide the full scale range of the sensor measured property. This is the output signal range multiplied by Value Multiplier you entered when configuring this sensor.</p> <p>▼ Because your devices most likely contain a variety of sensors that transmit diverse range of values, refer to the device’s manual to enter the correct values.</p>
<p>Normal max</p>	<p>Enter the maximum measured property value that is considered acceptable and will not set off alarm.</p>
<p>Limit max</p>	<p>Enter the maximum value that is considered beyond the normal readings range but not yet dangerous for your equipment. If the reading value is within the Normal max – Limit max range, you will receive Warning alert. Values that exceed this limit will trigger Danger alert.</p>

For each range, you can use the color pickers to change the color denotation for displaying readings on the widget.

▼ If you set up more than one widget on a single sensor, the **Normal max**, **Limit max**, and **Danger** settings will be available only for the first widget you configure. This is to prevent multiple alarms to be triggered at once for this sensor.

Explore the available real-time widgets for analog digital output sensors below:

2D Graph

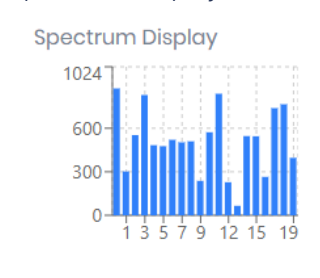


Plots the graph with the last 20 values received from the sensor. The x-axis of the graph shows the order in which the values were received from 0 onward.

The y-axis shows the received values in the **Range** scale.

Hover to the value to view the details.

Spectrum Display



Displays the last 20 sensor readings on a histogram chart. The x-axis of the graph shows the order in which the values were received from 0 onward; the y-axis shows the received values.

Hover to the value to view the details.

Variable Values

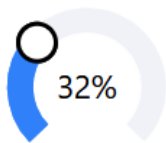
Variable Values

Value: [236.00, 987.00, 949.00, 643.00, 360.00, 490.00, 874.00, 573.00, 241.00, 115.00, 110.00, 966.00, 673.00, 598.00, 52.00, 236.00, 200.00, 820.00, 935.00, 650.00]

Outputs the array of last 20 received values. For additional accuracy, readings are displayed to 2 decimal places.

Knob

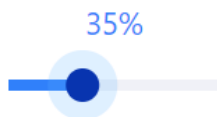
Knob



Displays the last received reading on a knob chart. Hover to the value to view the details.

Slider

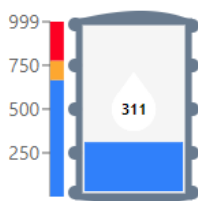
Slider



Displays the last received reading on a slider. Hover to the value to view the details.

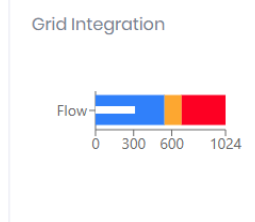
Linear

Linear



Visualizes the last received reading value in a tankage. To the left of the tankage the ranges of normal, limit, and danger levels are shown.

Grid Integration



Shows the received value on a three-color grid chart.

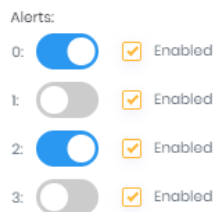
In the **Label** field, you can enter a title for y-axis of the chart.

Switch Widget for Discrete Output Sensors

Switch widget applies to sensors with discrete output such as tumblers and monitors the state each digital discrete output that you provided in the **Bit Mask** when configuring the sensor.



When you select such sensor from the drop-down, this **Widget Configuration** expands the following settings:

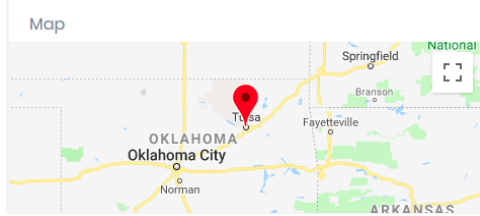


For each switch output, define the expected state using the corresponding toggle and select the **Enabled** check box to turn on the alarm notifications.

Map Widget and Settings

Using this widget, you can track the location of nonstationary facility. If the GPS is enabled and running on the RV50 gateway of your operative site, you can use **Map** to see its exact location. This widget is available in two modes:

- **Preview** — The widget preview as displayed on your dashboard. To zoom in, double-click the location you want to enlarge.
- **Fullscreen** — Click the **Fullscreen** icon at the upper-right corner of the widget to expand the map. To zoom in, you can either double-click the location, or hover and scroll up the wheel.



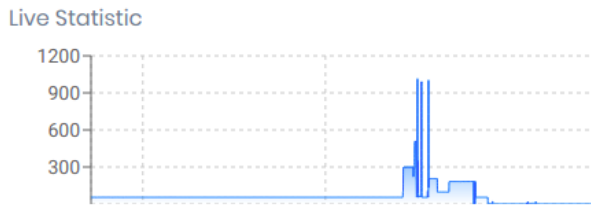
Location	Typically, if the GPS is enabled, the following settings are obtained from RV50 automatically. Otherwise, specify the location's Latitude and Longitude using the decimal degrees formatting.
Zoom	Enter the initial zoom level to apply.

Statistical Review Widgets

Using these widgets, you can get statistical insights on the sensor performance and review the daily or monthly trends.

Live Statistic Widget and Settings

This widget shows per day distribution of the received sensor readings on a histogram.

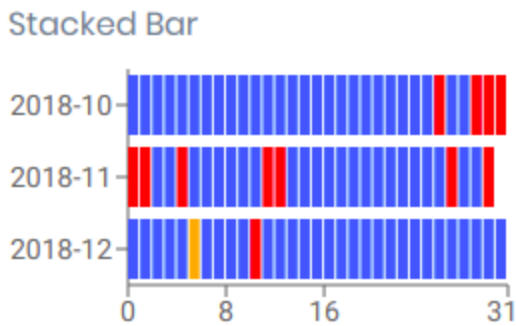


In the **Day** selector, select a date you want to plot the **Live Statistic** for.

Stacked Bar Widget and Settings

Using this widget, you can examine if there were any alarm triggering events for a sensor. Each dataset on this widget corresponds to a month. The days of each included month are displayed on the x-axis, and each month (in a year-month notation) is shown on the y-axis.



Color notation corresponds to presence of any alarming events: the days with no such occurrences are displayed in blue, the **Warning** or **Bitmask** (switch) alerts are shown in orange, and the **Danger** is denoted with red.



To select a time range, choose the start date in the **From** selector, and the end date in the **To** selector.

Editing and Removing Widgets

To edit or remove a widget, enable the edit mode. In this mode, click the icon at the upper-right corner of a widget to:

-  **Edit Widget** Edit widget settings. This launches the **Widget Configuration** panel.
-  **Delete Widget** Remove the widget from the dashboard.

Review Alarm Event Reports

When the dashboards are up and running, any event such as danger or warning that triggers the alarm is logged into the report and available for review. Follow these steps:

1. Log in to Viking SCADA as **Admin**.
2. From the left-hand navigation links, select **Reports**.

This launches the **Reports** page:

* From: * To: Download

Widget name	Notification	Type	Date	Alert	Value
Q17	-	danger	12/1/2018	900	990.25
Q18	Email	danger	12/1/2018	900	990.25
Q19	Email	danger	12/1/2018	900	990.25
Q20	Email	danger	12/1/2018	900	990.25
Q1	Email	warning	12/1/2018	800	813.25
Q2	Email	warning	12/1/2018	800	813.25
Q3	SMS, Email	warning	12/1/2018	800	813.25
Q4	-	warning	12/1/2018	800	813.25
Widget Name32	Email	bitmask	12/1/2018	1	0
Widget Name32	Email	bitmask	12/1/2018	1	0

< 9 10 11 >
10 Displaying 91 - 100 of 321 records

Report Contents

If any role notifications have been set for a widget that triggered an alarm, their types are listed under the **Notification** column. In this case, click the widget name to view a list of users the notifications were sent to.

Under the **Type** column, you can review what type of alarm was triggered. These come in three types and indicate when:

- warning Readings value exceeds the configured **Normal max** but not **Limit max**.
- bitmask The alerts configured on **Switch** widget are not in the expected state.

dangerReadings value exceeds the configured **Limit max**.

The **Alert** column lists the configured triggering values, and the **Value** displays actual values received from your sensors.

Sort Reports by Dates

You can review the report tailored to a specific date range. Select a start date in the **From** and end date in the **To** date selectors to see the reports for that timeframe.

Download Report to Your Computer

Click the Download button to download the report in the Excel format with .xlsx extension to your browser's default folder for downloads. Typically, that is **C:\Users\Your Username\Downloads**.

Select a Servicing Plan That Meets Your Demands

In Viking SCADA, we believe that honesty is the best policy. We do not charge any hidden fees whatsoever and there are no contracts for long-term commitments or other contract obligations.

In this section, you can explore our servicing plans, payment methods available, and trial option.

Use Free Trial to Boost Your Monitoring Routine Right Away

We encourage you to try the benefits of Viking SCADA firsthand as soon as you sign up. You get 20 MB of traffic for free and the stream starts when you've configured a dashboard with at least one sensor widget. Test what widgets bring the most value from your type of readings and gather statistics immediately.

About Traffic Use

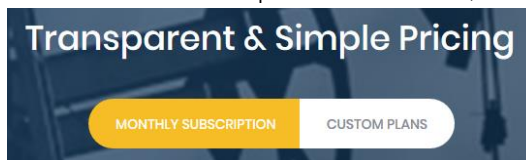
The traffic is essential when talking about remote monitoring. The Viking SCADA connects to the RV50 gateway and receives the readings directly. The payment plans are based upon the traffic needed to obtain the information and import it into the application. This may significantly vary depending on the scale of your sites: the number of devices in your network, the number and type of sensors on each of the devices.

That is why the servicing options and plans center around the amount of traffic you're likely to need.

What Payment Plans Are Available?

To view the available custom plans, follow these steps:

1. Log in to Viking SCADA as **Admin**.
2. On the top navigation bar, click the **Purchase** button.
This launches your **Purchase** page.
3. To switch between plan alternatives, select the plan type you want to view:



Monthly Subscription

Using monthly subscription, the purchased amount of traffic will be immediately available and the billing cycle begins the day you purchase a plan for the first time. Your credit card will be charged every month.

Custom Plans

When you buy a custom plan, the purchased amount of traffic will be immediately available and you'll be subscribed until the traffic you've paid for ends.

Can I Switch between Plans or Cancel My Subscription?

Yes, you can change your plan at any time, or cancel your subscription at any moment.

What Payment Methods Are Available?

We support several payment methods:

Credit Card

All major credit cards including Visa, MasterCard, Discover, American Express

Transfer

Wire Transfer, Check or Money Order

▼ To request a transfer payment, contact our support at [link to email](#).

Viewing Transactions History and Getting Invoices

To see the history of your purchased monthly subscription and custom plans, follow these steps:

4. Log in to Viking SCADA as **Admin**.
5. From the left-hand navigation links, select **Manage My Account**.
This launches your **Transactions** page.

On the **Transactions** page, you can view the summary of your payments including their date, status, type, and also get invoices.

For any payment from the list, under the Invoice column, click Get invoice to launch the Invoice page. On this page, you can print the selected invoice by clicking the **Print** (🖨️) icon. This will launch the printable page with default print settings of your computer.

Contact Us

If you have any questions or need any help, please feel free to contact us.

Located at 3235 S Harvard Ave, Tulsa, OK 74135

Call us at +1 (918) 335-3318

Email us at sales@vikingscada.com