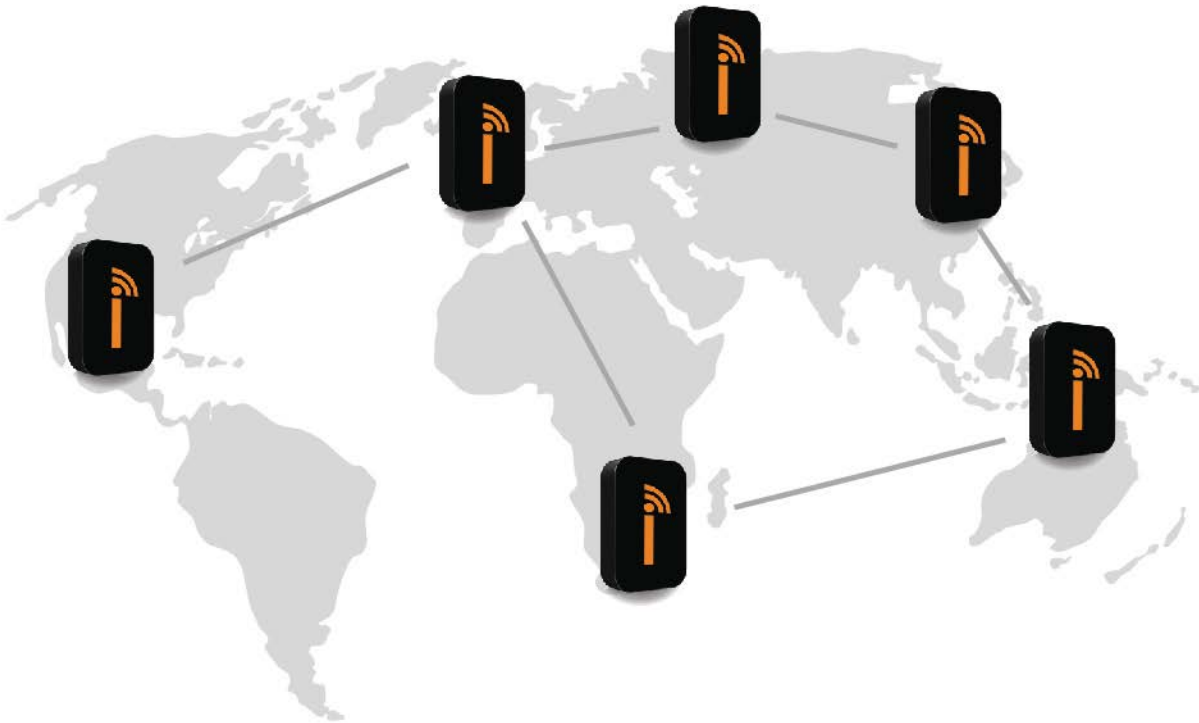




A wireless Mesh IoT sensor system



# User Manual


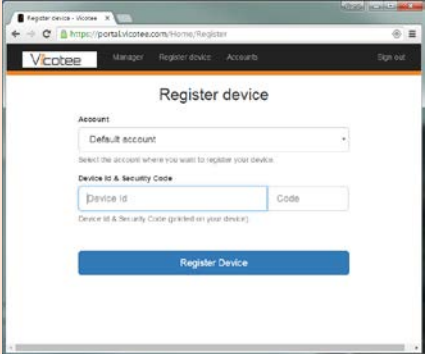

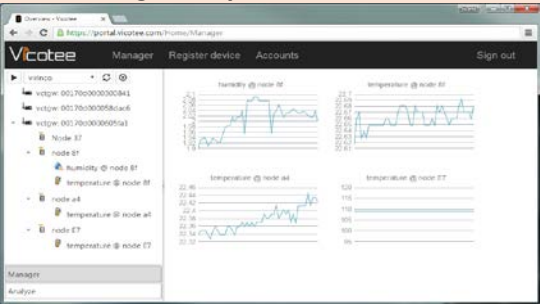
[vicotee.com/pdf/usermanual](http://vicotee.com/pdf/usermanual)

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# 1 QUICK START GUIDE

<p><b>Vicotee Bifrost</b></p> 	<h2>Setup Bifrost Gateway</h2>	
	<p><b>1: Register gateway on Vicotee Portal</b></p>  <p>Use Device ID &amp; Security Code printed on label for web portal Or scan QR code with a smartphone for app</p>	<p><b>2: Connect gateway to internet</b></p>  <p>Turn ON gateway connect to internet, and wait for gateway to connect to the Vicotee cloud service; see below for details</p>
	<p><b>3: View gateway on the Vicotee Portal</b></p>  <p>Gateway will show up in the "Manager" part of the Portal</p>	

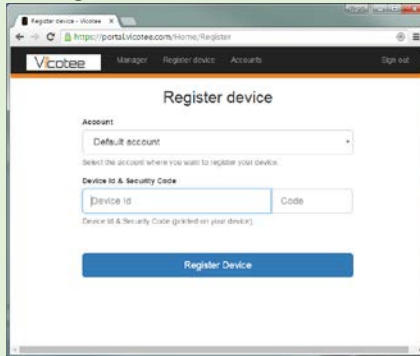
### Vicotee Njord



Series 10000 – 1zzzz

## Setup Njord node

### 1: Register node on Vicotee Portal



Use Device Id & Security Code printed on label for web portal  
Or scan QR code with a smartphone for app

### 2: Connect any external sensors\*



\*: Only applicable for selected models

### 3: Turn ON node



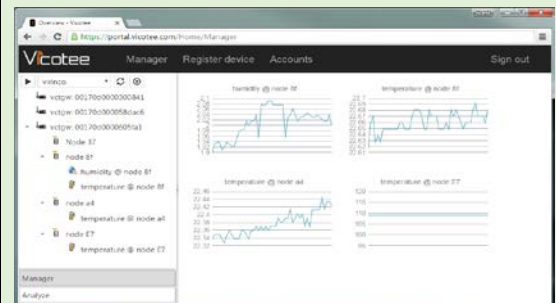
Press power button to turn node ON

### 4: Wait for node to connect to gateway



Vicotee logo will flash until connection has been established; see below for details

### 5: Collect data



Watch data flow into the Vicotee Portal either on web or app

## 2 NJORD LOGO FLASH SIGNALS

The Vicotee logo on the Njord nodes double as a simple user interface by use of flashing LED signals. Refer to table below for definition of signals.



Fig. 1 Vicotee Flashing Logo

Flash Sequence		Message
Quick Flash (*-*--*)	0.5 sec ON / 1.0 sec OFF	Node Starting up – Continuous until 30 seconds after connection to gateway has been established
Slow Flash (***_---**_*---***)	1.5 sec ON / 1.5 sec OFF	Node configuration update is being received and implemented
2 * Rapid Flash (*-*)	0.2 sec ON / 0.2 sec OFF 3 sec pause then repeat	Node is offline or has low power
3 * Rapid Flash (*-**-*)	0.2 sec ON / 0.2 sec OFF 3 sec pause then repeat	System error

## 3 BIFROST LED FLASH SIGNALS

The Bifrost gateway is equipped with two LEDs to indicate communication state to the Vicotee cloud service (☁) and to the wireless mesh network (📶).

When connected the LEDs will be continuously lit, when receiving data on either network the LEDs will flash.



Flash Sequence		Message
LED OFF(---)	OFF	Not connected
LED ON (***)	Continuously Lit	Gateway connected
LED Flashing (***_---**_*---***)	1 sec ON / 150 msec OFF	Receiving data

## 4 VICOTEE WEB PORTAL

The backbone of the data handling of the Vicotee sensor system is the Vicotee Web Portal. This cloud-based portal is built on the Virinco WATS technology. Data is accessible from the cloud either through the web portal using a web-browser or through our dedicated app for smartphone/tablet access.

### 4.1 GETTING STARTED

In order to log and access data from Vicotee devices users will need to create a profile on the Vicotee Web Portal. This is done by going to <https://portal.vicotee.com> and clicking the *Join/Sign in* link in the topmost right-hand corner.

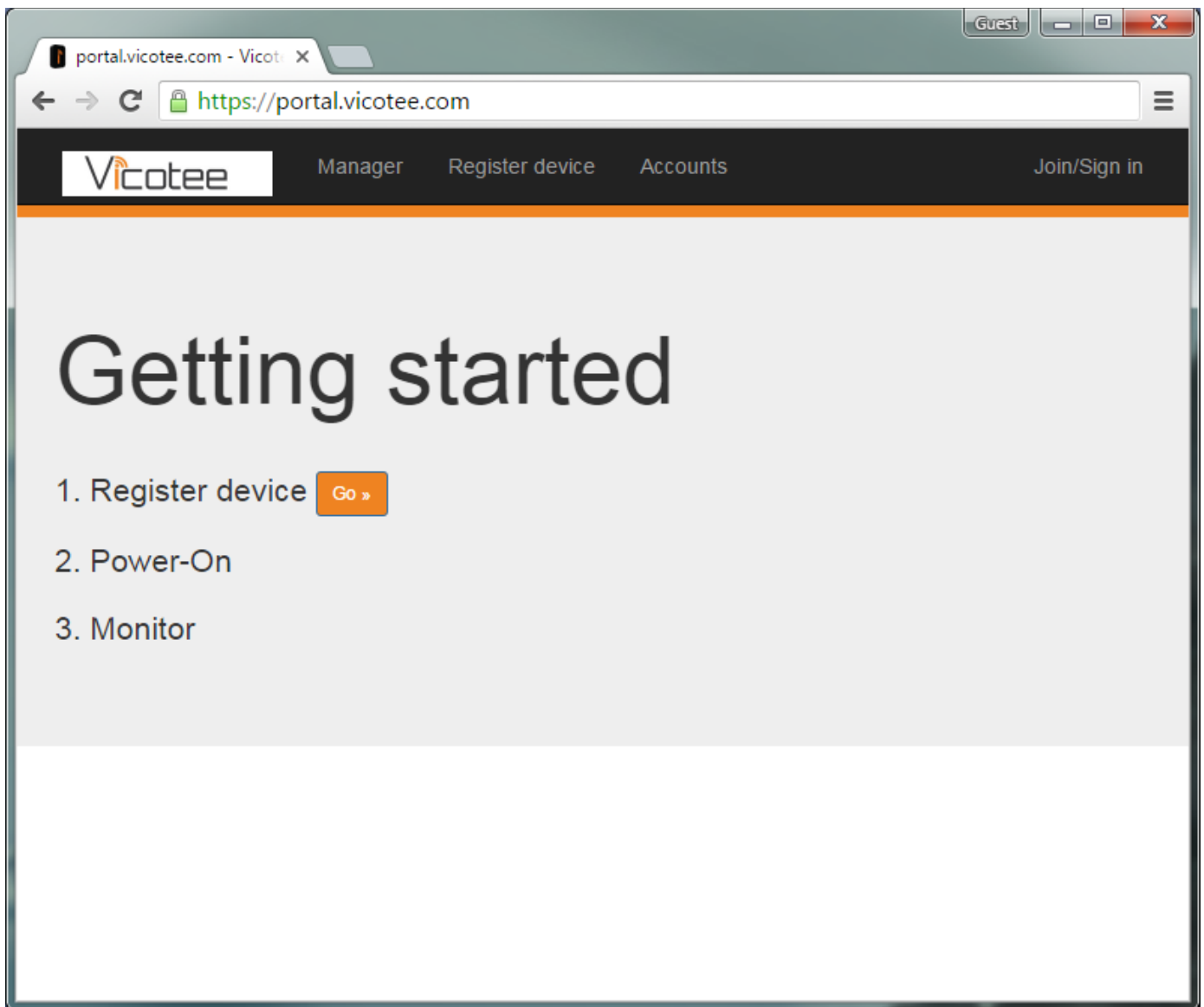


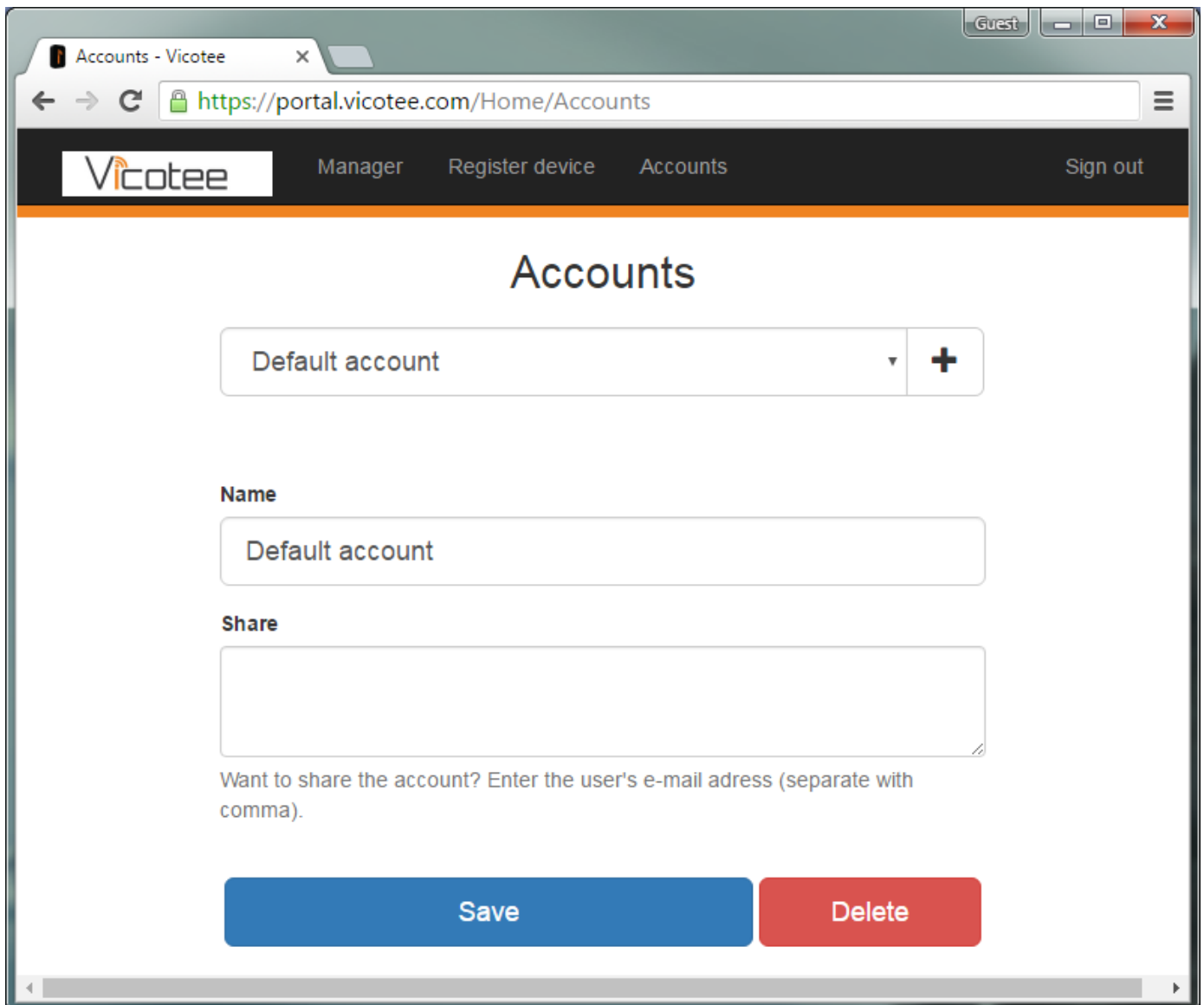
Fig. 2 Vicotee Web Portal Getting Started Page

## 4.2 SETTING UP ACCOUNTS

With a profile in place, it is possible to set up a number of accounts in the system in order to keep track of several Vicotee networks and share these with colleagues or friends.

All users have a default account set up when the profile is created and new accounts are added by clicking the *plus sign (+)* next to the dropdown list of available accounts and giving the new account a name using the Name-box. Any accounts shared to the active profile from other profiles will appear in the dropdown list automatically.

Accounts can be shared between profiles in the system by adding their e-mail addresses in the bottommost field in the screen.



The screenshot shows a web browser window with the URL <https://portal.vicotee.com/Home/Accounts>. The page title is "Accounts". At the top, there is a navigation bar with the Vicotee logo and links for "Manager", "Register device", "Accounts", and "Sign out". The main content area features a dropdown menu currently showing "Default account" with a plus sign (+) to its right. Below this is a "Name" field containing "Default account". Underneath is a "Share" field, which is empty. A note below the share field reads: "Want to share the account? Enter the user's e-mail adress (separate with comma)." At the bottom of the form are two buttons: a blue "Save" button and a red "Delete" button.

Fig. 3 Vicotee Web Portal Accounts Page

### 4.3 REGISTERING DEVICES

In order to capture data from nodes, both nodes and gateways need to be registered to an account. This is done by selecting the account to which the device is to be added and entering the device Id and Code. These are printed on the device label.

With device information entered into the Vicotee Web Portal, turn on the device and the system will allow the device to connect and start logging data.

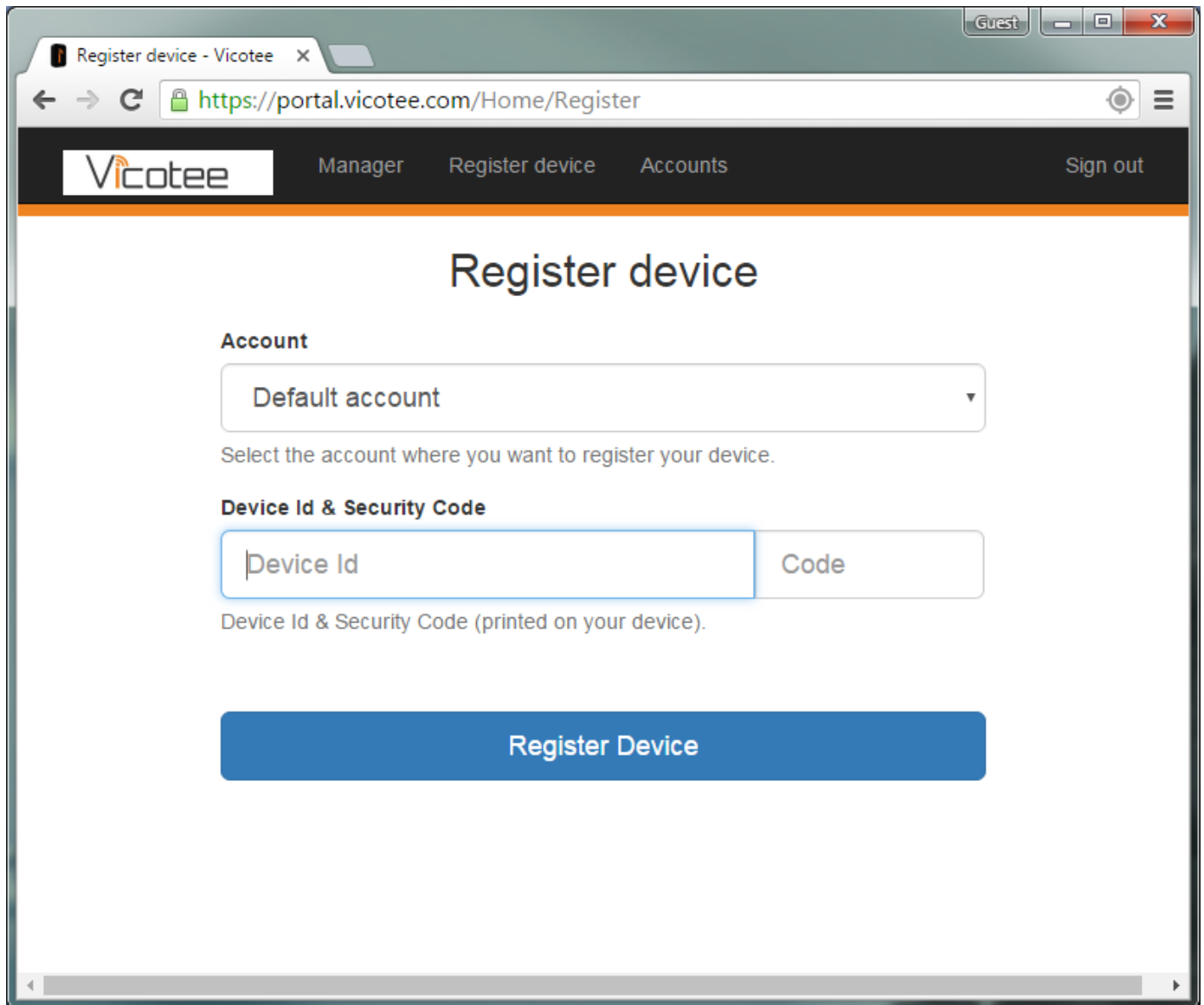


Fig. 4 Vicotee Web Portal Register Device Page

### 4.4 MANAGING DATA

With accounts set up and devices registered (See above paragraphs on how to do this), data should start flowing into the system. With a couple of devices attached, the data manager overview should resemble Fig. 5 showing historical data for the attached sensors, in this case a series of humidity and temperature sensors.



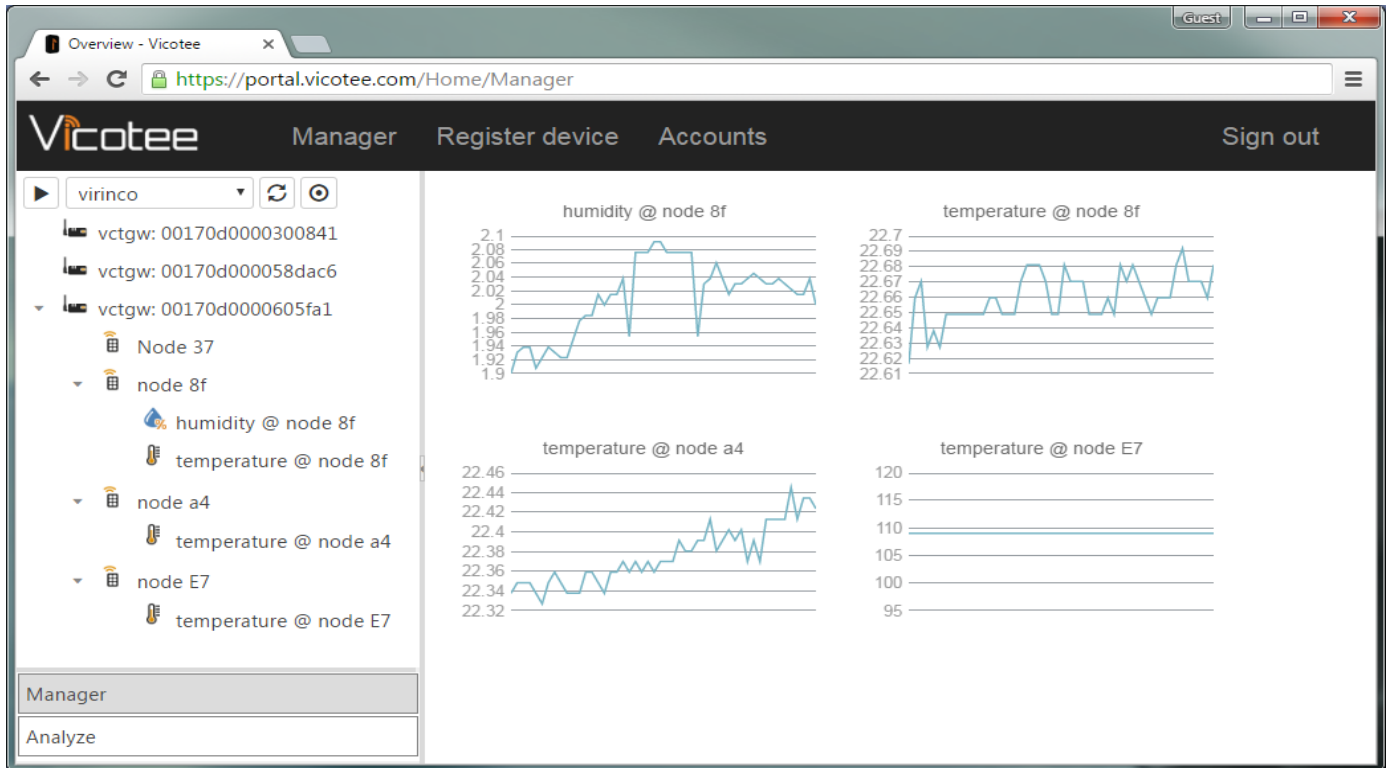


Fig. 5 Vicotee Web Portal Manager Page – overview

Selecting any of the sensors, using the menu on the left-hand side of the screen, will open a window for the specific sensor with the possibilities to see the data as a chart (Fig. 6) or as a grid (Fig. 7) as well as setting options for the specific sensor. In the grid view, a number of filters can be set up in order to select which data is shown.

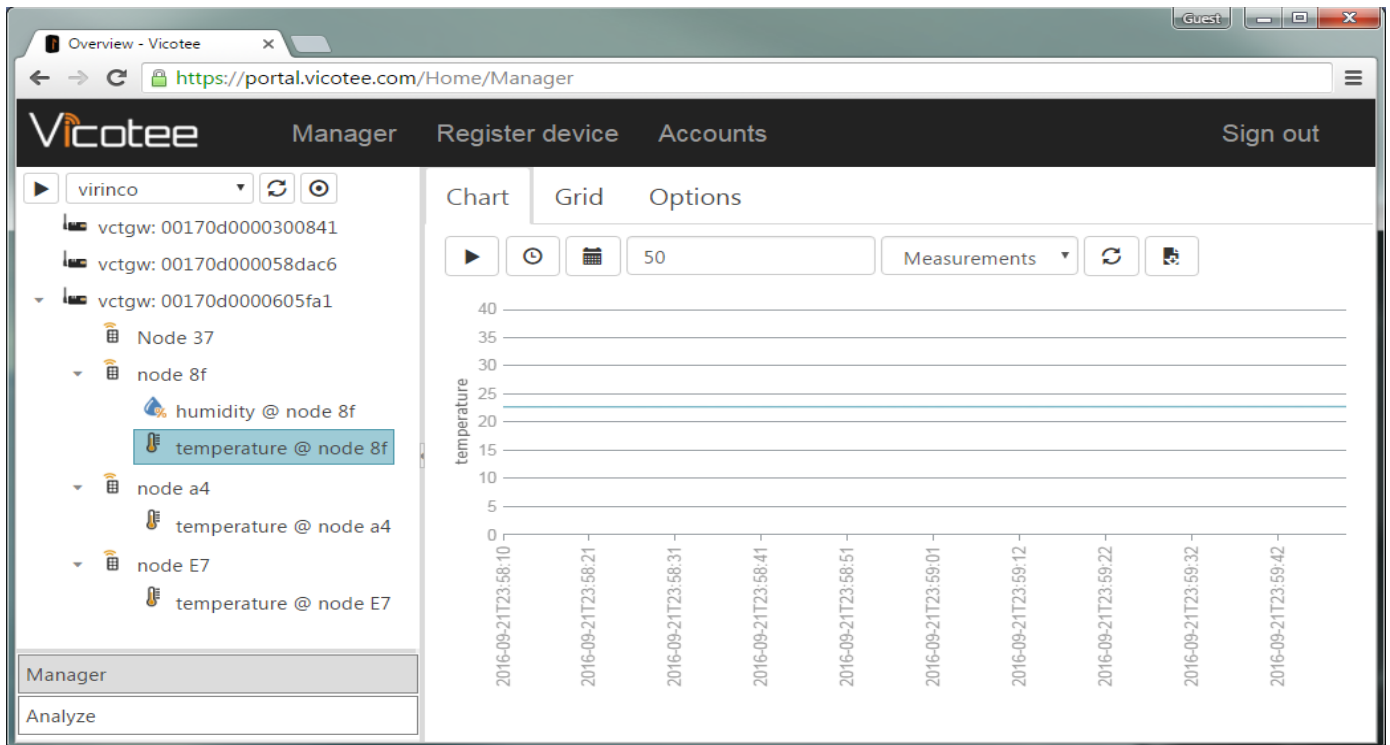


Fig. 6 Looking at data from a specific sensor in chart mode

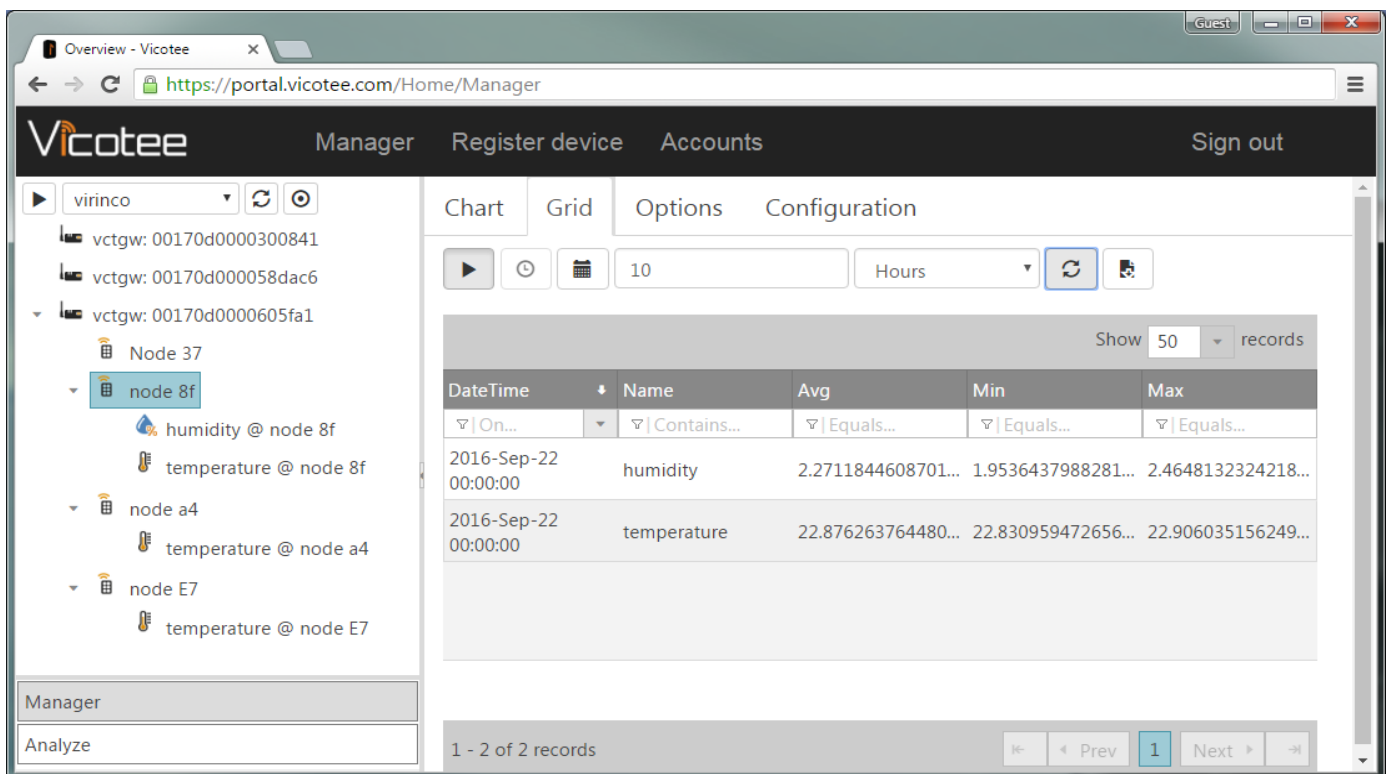


Fig. 7 Looking at data from a specific sensor in grid mode

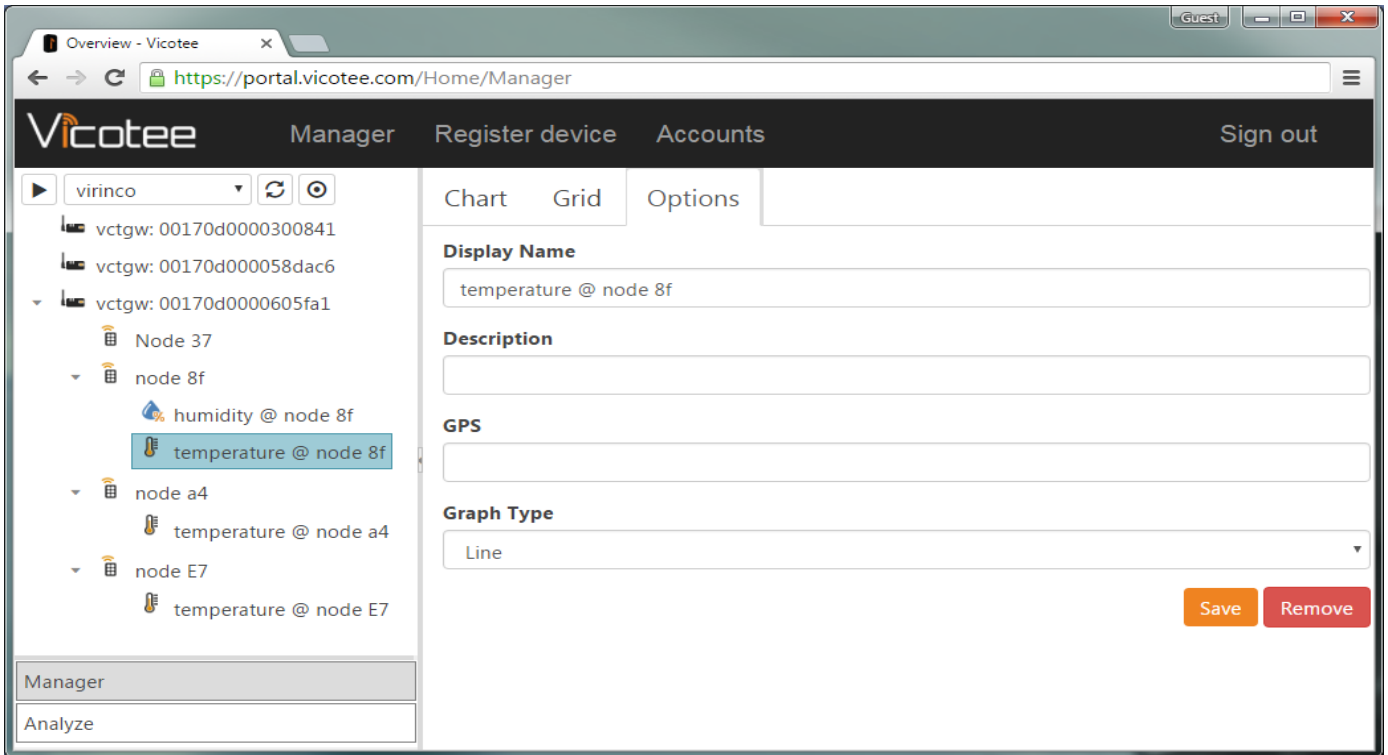


Fig. 8 Sensor options

Switching the Data Manager to data analysis mode allows for more in-depth analysis of sensor data, e.g. comparison of data from different sensors as shown in Fig. 9.

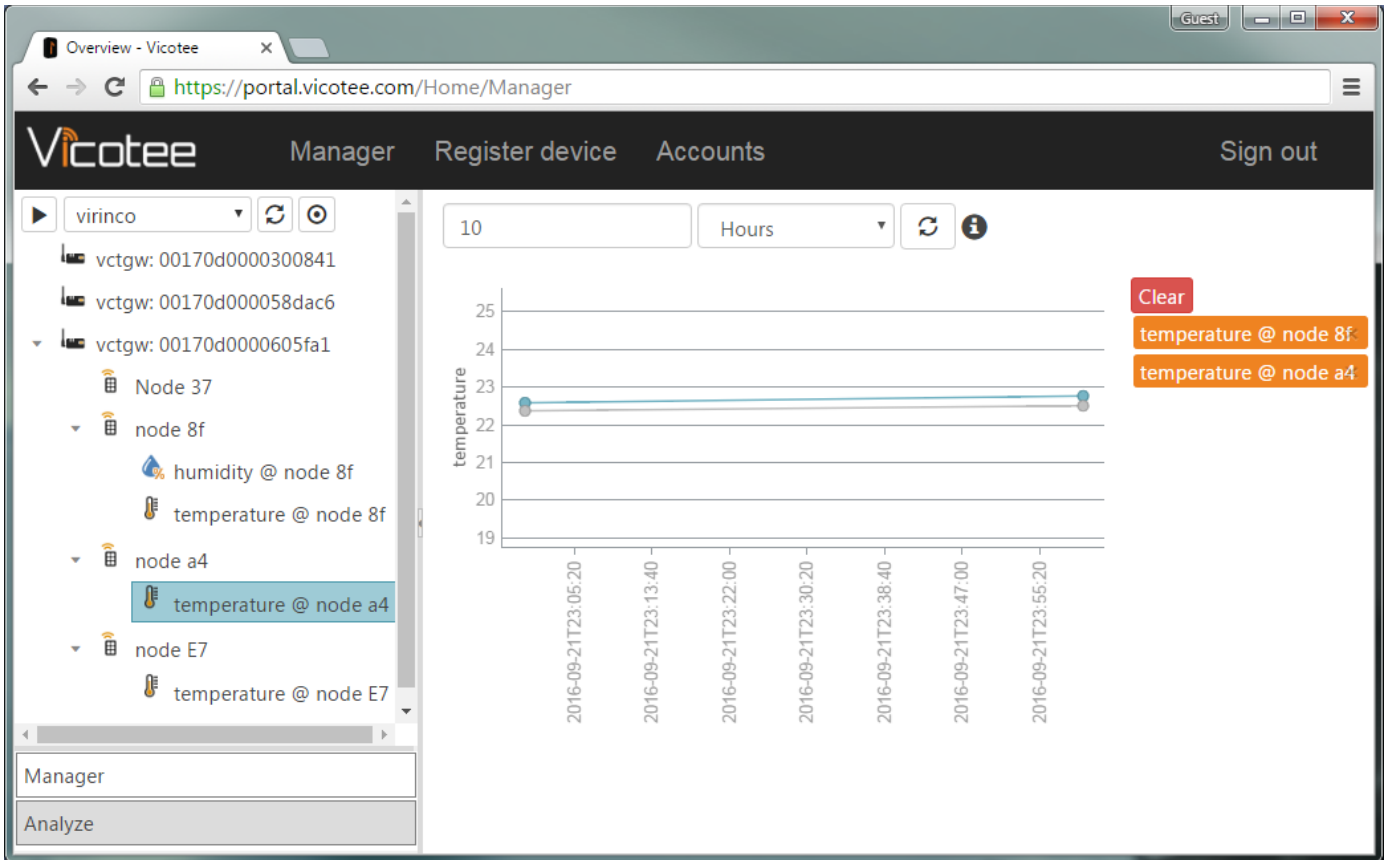


Fig. 9 Using the Data Manager for Data Analysis

## 5 VICOTEE PORTAL APP

All functionality of the Vicotee web portal can also be found in the Vicotee app, downloadable through Google Play and Apple App store.

More info and screen shots to come.



## 6 TECHNICAL DOCUMENTATION

Datasheets and other technical documentation for both Bifrost and Njord devices can be downloaded from <http://vicotee.com>.

## 7 CE DECLARATION OF CONFORMITY – NJORD

# EU Declaration of Conformity

Object of the declaration:

Product: Vicotee Njord

Series: 10000 – 1zzzz



Manufacturer: Vicotee AS

Address: Gråterudveien 20, NO-3036 Drammen, Norway

This declaration is issued under the sole responsibility of the manufacturer

The object of the declaration described above is in conformity with the relevant Union harmonization legislation:

2014/30/EU The Electromagnetic Compatibility (EMC) Directive

2014/53/EU The Radio Equipment Directive

2011/65/EU The Restriction of the use of certain hazardous substances (RoHS) Directive

Conformity is shown by compliance with the applicable requirements of the following documents:

Radio	EN 300 328 v1.8.1 (2012-04)
	IEEE 802.15.4e
EMC	ETSI EN 301 489-17 V2.2.1 (2012-09)

Signed for and on the behalf of: Vicotee AS

Place of issue: Drammen, Norway

Date of issue: October 21, 2016

Name: Richard Evje Pettersen

Position: CEO

Signature:



The technical documentation for the product is available from the above address.

## 8 CE DECLARATION OF CONFORMITY – BIFROST

# EU Declaration of Conformity

Object of the declaration:

Product: Vicotee Bifrost



Manufacturer: Vicotee AS

Address: Gråterudveien 20, NO-3036 Drammen, Norway

This declaration is issued under the sole responsibility of the manufacturer

The object of the declaration described above is in conformity with the relevant Union harmonization legislation:

2014/30/EU The Electromagnetic Compatibility (EMC) Directive

2014/53/EU The Radio Equipment Directive

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