



INSTALLATION & SETUP GUIDE

Fort Digital Power Trip Alert + CO₂, Temperature and Humidity Sensor System

LIVE Monitoring | Backup Battery | 4G LTE + Wi-Fi



IMPORTANT Read the safety instructions before opening the enclosure, inserting or removing the SIM card, connecting power, changing settings or testing alerts.

SAFETY NOTICE This product is an environmental and power-status monitor. It is not a certified fire, smoke, gas-leak or life-safety alarm and must not replace any required certified protection system.

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1. Before You Begin

This guide explains how to position the Fort Digital monitor, install a Nano-SIM, power on the Main Module, add it to the Fort Digital Sensors app, configure Wi-Fi/4G connectivity and alerts, and commission power, CO₂, temperature and humidity monitoring.

WARNING Move the Main Module switch to OFF and disconnect its USB power before opening the enclosure or inserting, removing or checking the SIM card. The internal battery can keep the unit energised after USB power is removed.

Included Components

Qty	Component	Purpose
1	Main Module with integrated Sensirion SCD30	Power, CO ₂ , temperature and humidity monitoring; communications and app connection
1	Internal rechargeable NCR 18650 battery	Temporary backup operation during a power interruption
1	USB-C charging cable	Connects the Main Module to the 5 V adaptor
1	5 V USB adaptor	External operating power and battery charging
1	Device QR code and PIN	Adds the supplied unit to the mobile app

Not included: Nano-SIM card, mobile data plan, Wi-Fi service and site mounting materials unless stated in the quotation.

Select a Suitable Location

- Install indoors or in a protected, clean and dry location within the stated operating limits.
- Keep the open-air casing and SCD30 sensing area unobstructed so the device samples representative room air.
- Avoid direct rain, condensation, oil mist, corrosive vapour, explosive atmospheres and excessive dust.
- Keep away from direct sunlight, heaters, steam, air-conditioner outlets, fans, open windows and frequently opened doors unless that source is intentionally monitored.
- Do not place the unit directly beside occupants' faces; exhaled breath can temporarily raise CO₂ readings.
- Mount securely without blocking airflow or placing strain on the USB cable.



Keep the open casing and sensor airflow paths clear.

2. Install the SIM Card and Power On

For 4G LTE operation or cellular failover, use an activated Nano-SIM with a working mobile-data plan. Disable the SIM PIN lock before installation unless Fort Digital has confirmed otherwise.

STEP 1 Remove external power

Unplug the USB-C cable. Move the internal ON/OFF switch down to the OFF position.

STEP 2 Open the enclosure carefully

Loosen the enclosure screws with a suitable screwdriver. Lift the cover slowly because an antenna lead is attached inside. Do not pull, twist or strain the antenna cable.

STEP 3 Unlock the SIM holder

Slide the SIM-card holder to the left, then lift it open.

STEP 4 Insert the Nano-SIM

Place the SIM card into the holder according to the holder shape and printed orientation. Confirm that it sits flat and correctly aligned.

STEP 5 Lock the SIM holder

Close the holder, then slide it to the right until it locks with a click.

SIM HOLDER Slide left to unlock. Slide right to lock. Never insert or remove the SIM while the unit is powered.

STEP 6 Switch on the Main Module

Move the ON/OFF switch up to ON. The unit can start from its internal rechargeable battery before external USB power is connected.

STEP 7 Connect monitored power

Connect the supplied USB-C cable and approved 5 V adaptor to the power source that you want the system to monitor. A blue indicator confirms external power and battery charging.

POWER-TRIP MONITORING The adaptor must be connected to the monitored mains circuit. Do not power it from a UPS if you want an outage on that circuit to be detected.

STEP 8 Close the enclosure

After confirming normal indicator activity, position the cover without trapping the antenna lead. Reinstall and tighten the screws evenly.

Status Indicator Guide

Indicator behaviour	Meaning / action
Network indicator blinking	The modem is detecting or communicating with the mobile network. Allow time for registration.
Both network indicators remain solid	The SIM may be missing, incorrectly installed or unable to obtain service. Switch OFF before checking it.
Blue USB indicator on	External USB power is present and the internal battery is charging.
ALLOW START-UP TIME Allow the SCD30 and network connection to stabilise after start-up or relocation before judging readings or online status.	

3. Install the App and Add the Device

STEP 9 Install Fort Digital Sensors

Download the Fort Digital Sensors app from Google Play or the Apple App Store, or scan the app-download QR code below.



App download QR code

Google Play: play.google.com/store/apps/details?id=com.fortdigital.gpstracking

Apple App Store: apps.apple.com/ph/app/fort-digital-sensors/id6798488289

STEP 10 Open the app

Launch the app and select Add Device.

STEP 11 Scan the device QR code

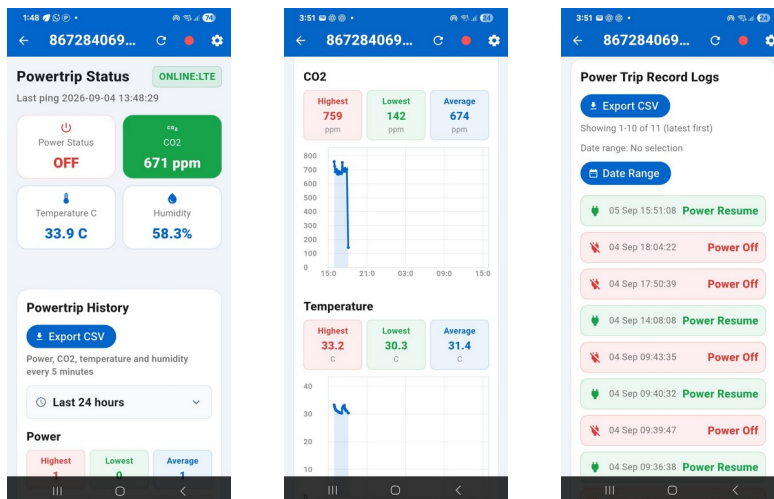
Scan the QR code printed on the Main Module or supplied with it. Do not confuse this with the app-download QR code shown above.

STEP 12 Enter the device PIN

Enter the PIN supplied for the Main Module. New users should enter their email address and complete account registration when prompted.

STEP 13 Confirm the live dashboard

Open the added device. Confirm that it shows ONLINE:LTE or ONLINE:WiFi and displays Power Status, CO₂, Temperature and Humidity.



Live dashboard | Recorded trends | Power-trip logs

PHONE PERMISSIONS Allow notifications for Fort Digital Sensors in the phone's operating-system settings. Battery optimisation or background restrictions may delay or suppress alerts on some phones.

4. Configure Connectivity

4G LTE and Wi-Fi

STEP 14 Confirm 4G LTE service

With the activated Nano-SIM installed, confirm that the app shows ONLINE:LTE. Check the SIM data plan, coverage and APN requirements if it remains offline.

STEP 15 Configure Wi-Fi

Open the device Settings page and follow the Wi-Fi setup option available in your firmware. Enter the approved network details, save them and allow the device to reconnect. Menu wording may vary by app or firmware version.

STEP 16 Keep LTE available as backup

Leave the activated Nano-SIM installed. If Wi-Fi becomes unavailable, the system can use 4G LTE so monitoring and alerts can continue, subject to coverage and data service.

FORT DIGITAL
SBO Licensed Telecommunication Company

Power Trip Alert + CO₂, Temperature and Humidity Sensors

with **LIVE** Status Monitoring + Backup Battery + LTE 4G + WiFi

MONITOR • ALERT • PROTECT • ANYTIME • ANYWHERE

*Compact
Reliable
24/7 Monitoring*

*Smarter
Environments
Safer Tomorrows*

**Swiss-Made
Sensirion SCD30**
Accurate CO₂,
Temperature &
Humidity Sensor

Power Status ONLINE
Power Status ON

CO₂ 467 ppm

Temperature 30.7 °C

Humidity 59.9%

History Logs

- Power Resume 04 Sep 14:08:08
- Power Off 04 Sep 11:48:22
- Power Off 04 Sep 09:43:35
- Power Resume 04 Sep 08:15:18
- Power Off 03 Sep 21:50:39

IDEAL FOR

- SERVER ROOMS
- OFFICES
- SCHOOLS
- WAREHOUSES
- FACTORIES
- HOMES

KEY BENEFITS

- ✓ Easy to Install
- ✓ Reliable & Secure
- ✓ Swiss-Made Sensor
- ✓ 24/7 Monitoring

*Cleaner Air
Safer Spaces
Peace of Mind*

FORT DIGITAL
SBO Licensed Telecommunication Company

YOUR TRUSTED IoT PARTNER
Reliable Monitoring for a Safer, Healthier Tomorrow

SWISS TECHNOLOGY
FOR A CLEANER, SAFER WORLD

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Dual-connectivity monitoring with internal backup battery

NETWORK REQUIREMENT Automatic failover requires an active SIM/data plan, suitable mobile coverage and correct configuration. A network transition may cause a brief interruption while the device reconnects.

Confirm the Connection

- Refresh the device page and confirm the current ONLINE connection label.
- Confirm the Last Ping time updates and live sensor readings continue to change.
- If both Wi-Fi and LTE are unavailable, restore at least one connection before commissioning alerts.

5. Configure Power and Environmental Alerts

STEP 17 Open Settings

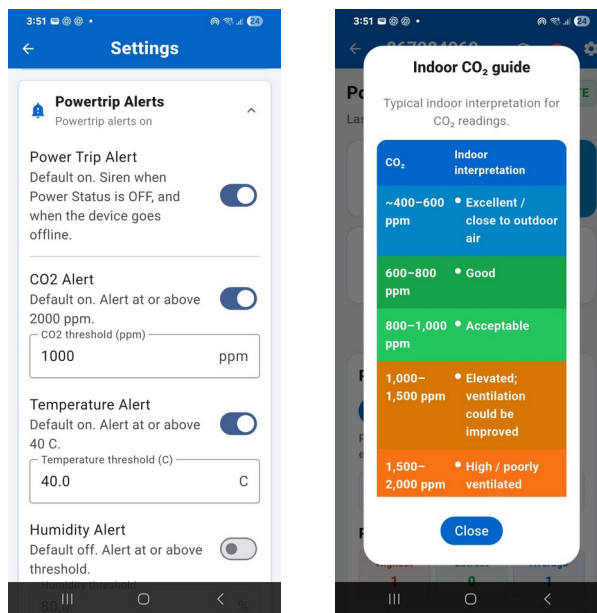
Tap the gear icon on the device page, then expand Powertrip Alerts.

STEP 18 Enable the required alerts

Turn on Power Trip, CO₂, Temperature and/or Humidity alerts as required for the site. The power-trip option also covers device-offline notification in the current app version.

STEP 19 Enter approved thresholds

Enter the customer-approved CO₂ threshold in ppm, temperature threshold in °C and humidity threshold in %RH, then save the settings.



Alert controls | In-app CO₂ guide

THRESHOLDS Thresholds are site-specific. They must be selected by the customer, facility manager or qualified professional according to the monitored environment, applicable requirements and response plan.

FIRE INDICATOR ONLY A simultaneous rise in CO₂ and temperature may justify investigation, but it is not proof of fire. Never use this product as a substitute for certified fire, smoke or gas detection.

Reading and Calibration Notes

- Allow readings to stabilise after first power-up, relocation or enclosure opening.
- Nearby people, breath, cleaning vapour, heat sources and rapid airflow changes can temporarily affect displayed values.
- If automatic self-calibration is enabled, the SCD30 should periodically experience fresh air close to normal outdoor background CO₂. Confirm the site is suitable before relying on this function.
- Do not alter calibration settings unless instructed by Fort Digital or a qualified technician.

6. Commission and Test the System

Perform these tests at the final installation position using an authorised phone. Record each result and restore all approved settings after testing.

STEP 20 Confirm live readings

Verify ONLINE status and confirm Power Status, CO₂, Temperature and Humidity are displayed. Allow readings to stabilise before recording the baseline.

STEP 21 Test the power-trip alert

Unplug only the external 5 V adaptor from the monitored mains circuit. Confirm Power Status changes to OFF, a power-trip notification is received and battery-backed reporting continues. Reconnect power and confirm Power Resume is recorded.

STEP 22 Test environmental alerts safely

For each required parameter, temporarily set the threshold just beyond the current displayed reading so the alarm condition can be reached without creating a hazardous environment. Confirm the correct alert, then immediately restore the approved threshold.

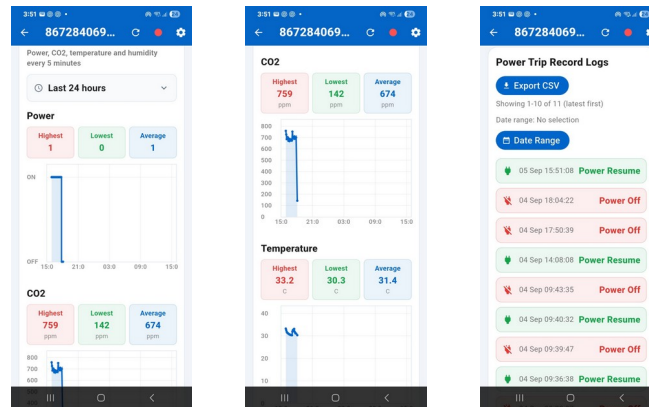
SAFE TESTING Do not use flame, smoke, vehicle exhaust, gas cylinders, extreme heat, steam or liquids to force a reading. These methods can be dangerous, damage the sensor or produce misleading results.

STEP 23 Test Wi-Fi to LTE failover

With the SIM active, temporarily disable the configured Wi-Fi connection without switching off the Main Module. Verify that it returns ONLINE through 4G LTE, then restore Wi-Fi.

STEP 24 Review records

Open the history section and Power Trip Record Logs. Confirm readings are recorded, trend charts display, test events are listed and CSV export is available.



Power history | Environmental trends | Trip/resume log

Test Record

Test	Expected result	Pass / date
Live data	ONLINE; all four values update	
Power trip/resume	Correct alerts and records	
CO ₂ / Temp / RH	Enabled alerts trigger correctly	
Wi-Fi failover	Device reconnects through LTE	

7. Troubleshooting, Maintenance and Handover

Troubleshooting Guide

Problem	Checks and corrective action
Device remains offline	Check switch, USB power, SIM position, data plan, APN, mobile coverage and Wi-Fi availability.
No sensor readings	Allow start-up time and confirm airflow is clear. Restart only after switching OFF and disconnecting USB power.
No push notification	Check phone permissions, app login, network status, the relevant alert switch and threshold value.
Power trip not detected	Confirm the 5 V adaptor is connected directly to the monitored mains circuit and not a UPS-backed outlet.
LTE failover does not work	Confirm active SIM data, correct carrier/APN settings and adequate mobile signal.
CO ₂ reading unexpectedly high	Check occupancy, breathing near the unit, poor ventilation, combustion sources and placement.
Temperature/RH seems offset	Move away from heat, sunlight, steam and strong airflow; allow time to stabilise.
Battery runtime is short	Fully charge and retest. Runtime varies with battery condition, temperature, signal and activity.

Routine Maintenance

- Keep the open-air casing and SCD30 sensing area clear; wipe the exterior with a dry, soft cloth.
- Do not spray cleaner, liquid or compressed air into the enclosure or sensor.
- Periodically test notifications, power-trip detection, Wi-Fi/LTE failover and backup-battery operation.
- Review history for repeated offline events, unusual drift or persistent threshold alarms.
- Inspect the adaptor, USB cable, mounting, enclosure and antenna lead; replace damaged parts promptly.

Final Commissioning Checklist

- Unit is secure, dry and positioned for representative room-air measurement.
- SIM holder is locked; enclosure is closed; antenna lead is not pinched.
- 5 V adaptor is connected to the intended monitored mains circuit.
- Device is ONLINE and power, CO₂, temperature and humidity values update normally.
- Wi-Fi and 4G LTE have been tested as applicable.
- Required thresholds, notification permissions and response contacts are confirmed.
- Power-trip/resume, environmental alert, failover and history tests are documented.
- Customer understands the system is not a certified fire, smoke or gas alarm.

SUPPORT If the device remains offline, readings do not update or alerts fail after these checks, switch the unit OFF before inspecting the SIM or enclosure and contact Fort Digital support.

SAFETY Maintain all required certified alarms, ventilation controls, emergency procedures and human supervision. Never rely on this monitor as the sole protection against fire, smoke, gas or hazardous air.

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