



Advanced remote monitoring has never been easier.

Discover mobile-connected and cloud-based
monitoring of measured values.



Learn about
easy and reliable
measurement
remotely.



celsicom-easyconnect.com

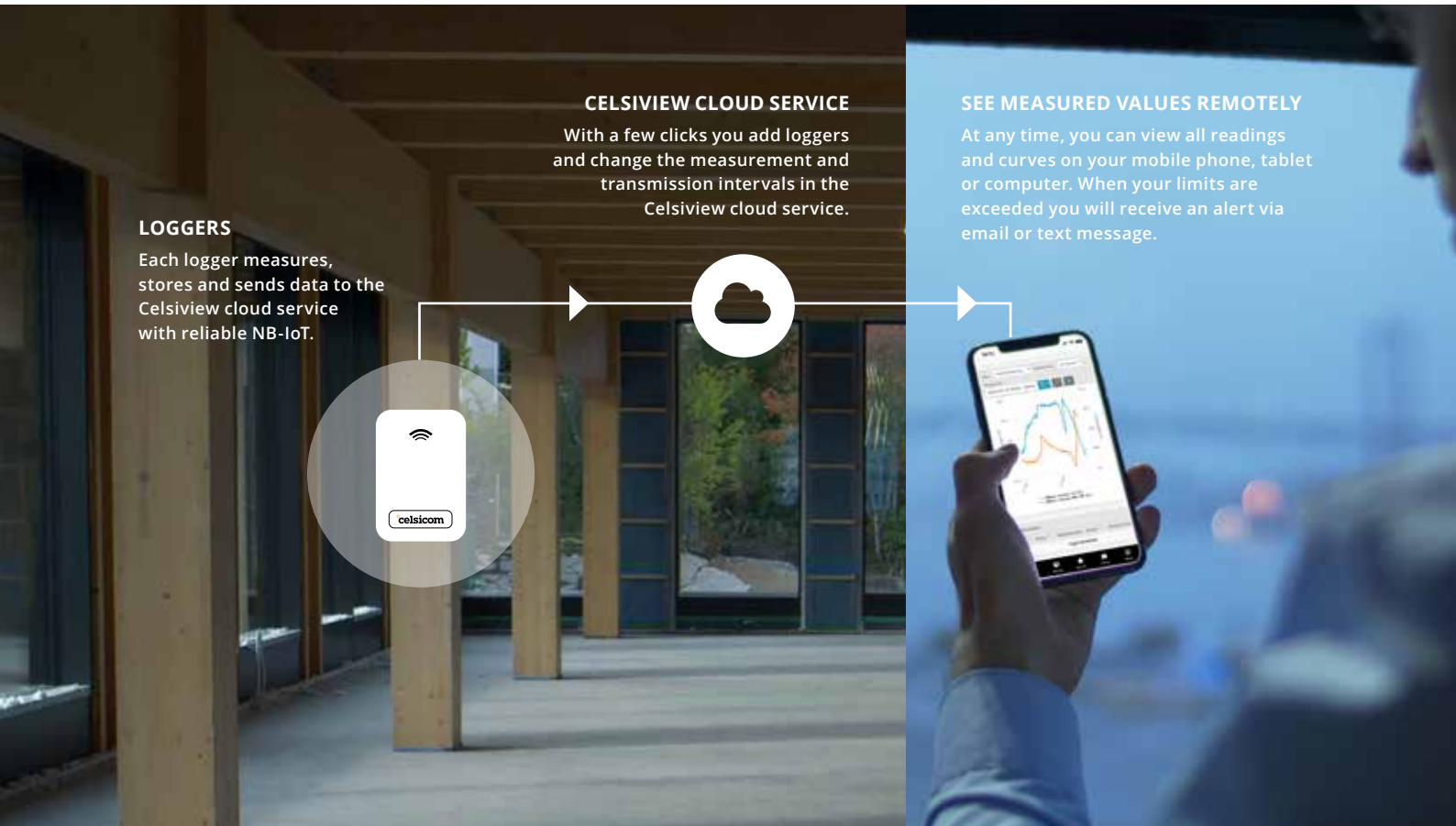
Futureproof technology.

Celsicom Easy Connect is a monitoring system consisting of connected loggers. Each logger uses NB-IoT (Narrow Band Internet of Things) technology to send measurement data to the cloud.

All data travels via the existing mobile network on a dedicated frequency that is solely dedicated to transmitting small amounts of data. This results in very good coverage - even in places where you might not be able to call or text with your mobile phone. The technology is future-proofed with global standard. Celsicom loggers can also be updated via the NB-IoT network, giving you a hassle-free maintenance.

No base station/gateway needed. Each logger measures and transmits directly to the cloud.

This is how remote monitoring works with Celsicom smart loggers:



3 main benefits of Celsicom Easy Connect.

EASY IN ALL SITUATIONS

After a quick installation, the logger takes care of itself. You can calmly focus on your work and check your data on your mobile, tablet or computer whenever you want.

HIGH OPERATIONAL RELIABILITY

All measurement data is sent directly and wirelessly from the logger using Narrowband-Internet of Things (NB-IoT) technology own frequency in the mobile network, which means minimal risk of interference.

SMALL INVESTMENT

Through conscious material choices and through thoughtful production, we have pushed costs. The result is a logger that contains and performs significantly more than it costs.

All in one compact logger. At an equally slim price.

BACKUP MEMORY

Even though all data is sent using reliable NB-IoT technology, things things can happen.

That's why there is an internal memory that stores measurement data in case of temporary problems in the network.

TRANSMITTERS WITH ACTIVATED SIM CARD

Your measurement data does not need to take any interference-sensitive detours via a gateway. All data is sent from the logger directly up to the Celsiview cloud service.

ALARMS

When your limit values are exceeded, you will receive an alarm via email and / or SMS.



BATTERIES

Most models are powered by two standard AA batteries. The operating time (between 12–36 months) is affected by battery type (lithium lasts longer) signal, temperature and how often the sensor alarms. Settings such as measurement interval and transmission are easy to adjust.

ROBUST AND DURABLE

The design of the sliding cover and screw holes (for wall mounting) makes the box dust and moisture resistant and that it also works in slightly harsher environments.

SENSORS

Can be both internal sensors and external cable sensors.



Once you have assembled and set up the logger (which doesn't take very long, see page 15), you no longer need to worry about limit values being exceeded. As soon as a set limit is exceeded, the logger automatically sends an alarm to the cloud service and on to predetermined users via SMS and/or email, so that they can react and take appropriate action quickly.

Only your imagination sets the limits.

Here are some of the many uses of Celsicom Easy Connect:



BUILDING CLIMATE / MOISTURE DAMAGE

Our loggers give you a quick overview of important measured values to ensure an optimal drying climate on site or after a moisture damage.



FOOD PRODUCTS

By easily installing loggers in all conceivable refrigeration and freezer compartments, you get continuous and reliable temperature monitoring of raw materials and food.



STORAGE

One or more smart loggers give you an unbeatable value for money, simple and safe monitoring of large and small stocks of valuable goods.



TRANSPORT

Celsicom loggers are perfect tools for measuring and environmental conditions during transport of all kinds of goods.



CONCRETE CASTING

Celsicom Easy Connect helps you keep track of concrete strength development and see when the curing process is complete.



INDOOR CLIMATE

We have different models that allow you to measure and evaluate the indoor climate in homes, offices and production facilities.

What do you need to measure?

Our growing range of grey loggers is available in different designs for specific measurement needs.



T600

Internal temperature sensor

Directly connected temperature monitoring for heat adjustment, for example, remote monitoring of climate rooms and indoor climate etc.

- Measuring range: -30 – +70 °C
- Accuracy: ±0.5 °C



TH600

Internal temperature / humidity sensor

Directly connected to monitoring of temperature, relative humidity, vapour content and dew point, for example when monitoring of building climate.

- Measuring range: -30 – +70 °C, 0 – 100 %RH
- Accuracy: ±0.5 °C, ±3 %RH (vid 0 – 90 %RH)



TC602

Two external TE sensors

Directly connected measurement of e.g. differential temperatures of heating systems, cooling processes etc.

- Measuring range: depending on thermocouple type, see page 12
- Accuracy: ±0.5 °C (applies to loggers without sensors)

Explore the wide range of sensors for TC602 at nordtec.se



THC600B

Internal sensor for carbon dioxide, air pressure, temperature, relative humidity and vapour content

Directly connected sensor for measuring air quality in a variety of environments, such as classrooms, training rooms, conference rooms and similar spaces.

- Measuring range: 0–10000 ppm CO₂, -30 – +70 °C, 800 – 1260 mbar absolute pressure, 0 – 100 %RH
- Accuracy: ±50 ppm + 3 % of the measured value (in the range 0 – 50 °C, 0 – 85 %RH och 400–5000 ppm), ±0.5 °C, ±1 mbar, ±3 %RH (at 0–90 %RH)



DP600

External sensors for differential pressure and temperature

Directly connected remote monitoring of differential pressure and temperature. Ideal for measuring pressure differences in homes and production facilities and monitoring filters and pressure control during decontamination missions.

- Measuring range: ±125 Pa
- Accuracy: 3 % of measured value (Pa)



THR600

Internal radon, humidity and temperature sensor

Directly connected logger for measuring of radon between 0 – 4000 Bq/m³ and also temperature and relative humidity. Delivers stable radon readings already after one hour.

- Meets the requirements of the Swedish Radiation Safety Authority method description for measurement of radon in workplaces
- Measuring range: 0 – 4000 Bq/m³, -30 – +70 °C, 0 – 100 %RH
- Accuracy: ±25 % at 200 Bq/m³, ±0.5 °C, ±3 %RH (at 0–90 %RH)



MM611B
External moisture analyser

Directly connected logger with 1.2 m long cable sensor for monitoring of moisture content in wood by resistance measurement. The desired measurement curve for pine, spruce or WME in the Celsiview cloud service.

- Measuring range: see page 13
- Maximum deviation: see page 13



TH601x
External temperature / humidity sensor

Directly connected monitoring of temperature, relative humidity, vapour content and dew point for moisture remediation, building moisture etc.

- Choose between two cable lengths: 0.4 and 2 metres
- Measuring range: -30 – +70 °C, 0 – 100 %RH
- Accuracy: ± 0.5 °C, ± 3 %RH (at 20 – 80 %RH)



T601x
External temperature sensor

Directly connected temperature monitoring with external cable sensor in e.g. refrigerators, freezers etc.

- Choose between two cable lengths: 2 and 5 metres
- Measuring range: -40 – +105 °C
- Accuracy: ± 0.5 °C

Keeping you on top of concrete.

Our yellow concrete computer is designed for one thing only: to show the evolution of concrete strength and when curing is complete.



Keep track of concrete strength

Model TC603 has a robust and water-resistant enclosure and is designed to be used together with 2 external thermocouple sensors. Several types can be used and the default setting is for thermocouple wire type T, which is easily mounted with pole screws. It also has 1 built-in internal ambient temperature sensor. A typical application is concrete temperature measurement and strength calculations.

Concrete strength

The picture above is an example of how the curve in the tablet, mobile phone or computer can look like during a concrete pour. By selecting concrete recipes in the cloud service, you get a strength calculation and can plan when to demolish the formwork in a more efficient way. You can even add your own concrete recipes if none of the already loaded standard recipes work for your application.

TC603

External sensors and internal sensor

- For concrete temperature and concrete strength
- Direct-connected temperature monitoring in concrete
- Inputs for 2 external wire sensors (to be ordered separately)
- Internal sensor for ambient temperature
- Measurement range: depending on thermocouple type (external sensors)
- -30 °C to +70 °C (internal sensor)
- Thermocouple accuracy: ± 0.5 °C (applies to logger without wire sensor)
- Accuracy internal sensor: ± 0.5 °C

A dream for adjusters.

Our Celsicom V600 instrument offers a unique solution for impressively fast and precise adjustment of ventilation systems.

V600

External sensor for air flow and pressure

Directly connected instrument for measuring reference devices and time-efficient adjustment of ventilation. Air flows can be displayed in l/s or m³/h while pressure is indicated in Pa.

- Measuring range: ± 320 Pa
- Accuracy: 3 % of measured value (Pa)

Ventilation adjustment has never been easier

All you need is the Celsicom V600, an optional pressure or airflow meter and a mobile phone or tablet. Then you can perform super-efficient adjustments. Even on really large ventilation systems – all by yourself. After selecting the reference exhaust air diffuser, simply connect the Celsicom instrument to the diffuser and start adjusting airflows. Via the web-based cloud service Celsiview on your mobile/tablet, you can see the reference device's flow as a percentage of the projected flow (according to proportionality principle).

Updated measured values – in seconds

The main benefit of Celsiview on your mobile / tablet during adjustments:

- Easy settings of K-factor and projected flows
- Access to reference nozzle flow (l/s), pressure (Pa) and flow in per cent against projected flow
- Automatically calculated flow rates for all devices to be adjusted
- Instantaneous updates of values if pressure changes occur in the system
- Time-efficient work as reference devices do not need to be checked several times
- A single ventilation technician can perform even large adjustments all by himself

Celsiview gives you access to all measurement data whenever you want.

When your limits are exceeded, you receive alerts via email and / or SMS and you can set how often each logger should measure and send data.

Current measured values and alarms

Via a standard browser on your mobile phone, tablet or computer you always see the latest updated values, wherever you are. If any of your set limit values are exceeded or below your set limits, you will also receive an alarm via email or SMS (optional).

Easy setting of transmission and logging time

You decide how often your values are measured and how often they are sent to the cloud. You can easily make these settings yourself. The factory setting on most models is logging every 5 minutes and sending every 3 hours, giving the logger a battery life of between approximately 12–36 months. Battery life varies depending on battery type, temperature, transmission interval and signal quality.

Cloud service

When you scan the QR code on your new loggers, you can either choose to create a new cloud account or add them to an existing account. The price for the cloud service is the same if you choose to have all your logs in one account or if you create a new one for each logger. This means that you can group the loggers in a way that makes sense in your application (per building site, floor, user profile, etc.). A tip is to give them relevant names, so that you can easily distinguish them from other logs.

Select concrete recipes and see the strength directly

If you work with concrete casting and have purchased Celsicom TC603, you can follow the concrete strength directly on your mobile or computer, after selecting concrete recipes in the cloud service (monthly fee per concrete computer will be added). You can even add your own concrete recipes, if none of the standard recipes can be used.

Efficient ventilation tool on your mobile phone / tablet

If you have chosen to invest in the Celsicom V600, you need to select the ventilation add-on in Celsiview (monthly fee per instrument will be added). It gives you access to smart features and updated measured values that will speed up your your tuning jobs significantly.

Unlimited storage

We store all your measurement data as long as you have a subscription, which means that you have the possibility to document temperature and humidity for a long time. Good if you need to show afterwards that values have stayed within specific limits.



“We have really struggled with the technology so that users do not have to do that.”

STEFAN CARLSSON, CELSICOM AB

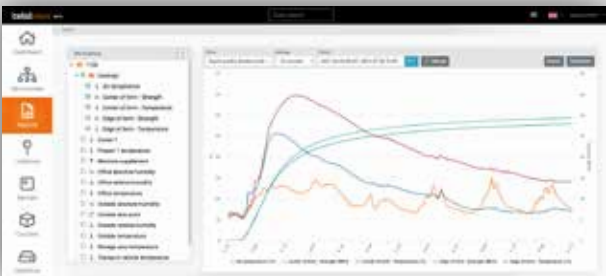




Innovative home screen (dashboard) which you design yourself according to your own wishes using simple drag and drop technology. Clear widgets give you all the important data you need. Active and ongoing alerts are also shown from the sensors/locations you have chosen to show on this dashboard.



The menu option "Reports" gives you a complete and quick overview of your measurement locations. Select the sites and the time period you want to analyse and then export the results easily to a PDF or Excel file. You can also send the report directly via email from within the report view. Automatic sending, e.g. weekly, of events and history is also possible through the "Report templates" function.



If you work with concrete castings, you can easily add and manage your current castings in the "Concrete" menu option. Add a new casting by selecting the sensors and the concrete recipe you want to use and the system will then take care of all logging and calculate the current strength. As the graph above shows, you can easily follow the temperature and strength development in a regular web browser on your computer, tablet or mobile. You will also be notified (by text message and/or e-mail) when your set strength has been achieved.



Via the menu item "My business" you can structure your entire activity with all the measurement sites you have set up. Assign certain measured values to certain users with the rights you choose yourself. Create several departments within your organisation where each department can manage its own sensors and measurement sites. The possibilities are endless!



With a few simple keystrokes measured values into clear graphs.



MODEL	T600	TH600	TC602	THC600B	DP600	V600
Measured value	Temperature	Temperature relative humidity vapour content, dew point	2 inputs for thermocouples type T/K	Carbon dioxide, air pressure, temperature, relative humidity and vapour content	Differential pressure and temperature (measurement technology flow measurement)	Differential pressure (measurement technology flow measurement)
Measuring range	-30 °C ... +70 °C	-30 °C ... +70 °C, 0-100 %RH	-200 °C ... +400 °C, type T -200 °C ... +1372 °C, type K	0-10000 ppm CO ₂ -30 °C ... +70 °C 800 to 1260 mbar absolute pressure 0-100 %RH	±125 Pa	±320 Pa
Accuracy	±0.5 °C	±0.5 °C ±3 %RH (at 0-90 %RH)	±0.5 °C*	±50 ppm + 3 % of measured value (at 0-50 °C, 0-85 %RH and 400-5000 ppm) ±0.5 °C ±1 mbar ±3 %RH (at 0-90 %RH)	3 % of measured value (Pa)	3 % of measured value (Pa)
IP class	53	43	43	43	43	43
Size	Enclosure 78 (w) × 114 (h) × 30 (d) mm					
Weight	114 grams (without battery)			119 grams	119 grams	119 grams
Power supply	2 × AA/LR6 1.5V batteries (not included)			2 × AA 1.5V lithium batteries (not included)		
Cable length	-	-	-	-	-	-
Battery life	Most models are powered by two standard AA batteries. Operating time (between 12-36 months) is affected by battery type (lithium lasts longer), signal, temperature and how often the sensor alarms. Settings such as measurement interval and transmission are easy to adjust.					Approx. 150 hours
Connection	NB-IoT (LTE Cat NB1) B20 Output power 23 dBm					
Measuring and transmission interval	Adjustable by user via the Celsiview cloud service					-
Memory	200 measurements					-
Certificate	CE					
Mounting	Mounted vertically with the screw holes facing up. NOTE! If the sensor is mounted against metal magnetic bracket 7040 0060 must be used.					Connected hose inner diameter ≥ 3 mm, length ≤ 1 m



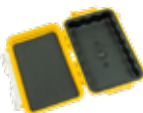












* Accuracy instrument, without sensor.

** Applies to measurement once per hour for MM611B.



T601x	TH601x	MM611B	THR600	TC603
Temperature	Temperature, relative humidity, vapour content, dew point	Humidity ratio	Radon, temperature and relative humidity	3 temperature inputs: 2 inputs for thermocouple type T/K 1 internal sensor
-40 °C ... +105 °C	-30 °C ... +70 °C 0-100 %RH	Resistance: 5 kOhm-600 MOhm Fur (Woodtek): 11.9-97.8 % Spruce (Woodtek): 12.4-97.8 % WME : 10.4-97.8 %	0-4000 Bq/m ³ -30 °C ... +70 °C 0-100 %RH	Thermocouple -200 °C ... +400 °C Internal sensor -30 °C ... +70 °C
±0.5 °C	±0.5 °C ±3 %RH (at 20-80 %RH)	Resistance: ±15 % at 50 kOhm-300 MOhm Fur (Woodtek): ±1 %FK at 12.9-30 % Gran (Woodtek): ±1 %FK at 13.4-30 % WME : ±1 %FK at 11.7-50.3 %	±25 % at 200 Bq/m ³ , ±0.5 °C, ±3 %RH (at 0-90 %RH)	Thermocouple ±0.5 °C* Internal sensor ±0.5 °C
53 (enclosure) 67 (sensor)	53	53 (enclosure) 68 (measuring node)	20	53 (IP 67 without cable)
Enclosure 78 (w) × 114 (h) × 30 (d) mm			Enclosure 110 (w) × 225 (h) × 63 (d) mm	Enclosure 125 (w) × 200 (h) × 75 (d) mm
114 grams (without battery)			510 grams	620 grams (incl. battery)
2 × AA/LR6 1.5V batteries (not included)			12 V DC / ≥1A (1.5 m mains adapter incl.)	2 × AA/LR6 1.5V (included)
2 or 5 m	0.4 m or 2 m	1.2 m	-	-
Most models are powered by two standard AA batteries. Operating time (between 12-36 months) is affected by battery type (lithium lasts longer), signal, temperature and how often the sensor alarms. Settings such as measurement interval and transmission are easy to adjust.				
NB-IoT (LTE Cat NB1) B20 Output power 23 dBm				
Adjustable by user via the Celsiview cloud service				
200 measurements				
CE				
Mounted vertically with the screw holes facing up. NOTE! If the sensor is mounted against metal magnetic bracket 7040 0060 must be used.			-	Suspended in the the supplied carabiner.

Accessories.

		DIMENS. (W × H × D)	QUANTITY	ITEM NO.
Thermocouple wire type T PVC insulated thermocouple wire on roll. Brown/white. The range also includes glass fibre insulated wire.		–	1	100 m: A10TX-100 50 m: A10TX-50 25 m: A10TX-25
Magnetic bracket NB The magnetic bracket is used to attach Celsicom Easy Connect boxes to metal surfaces (not certain stainless steel variants), to facilitate installation and avoid transmission problems.		–	1	7040 0060
Water resistant enclosure – internal sensor Robust, shatterproof, water and dust resistant enclosure that protects your Celsicom Easy Connect box with internal temperature sensor in most weather conditions. Place the box in the enclosure and close the lid.		132 × 90 × 42 mm	1	7040 1020
Water-resistant enclosure – external sensor Robust, shatterproof, water and dust resistant enclosure that protects your Celsicom Easy Connect box in most weather conditions. Place the box in the enclosure and clip the external cable sensor into the edge moulding.		162 × 97 × 45 mm	1	7040 1040
Service bag for metering boxes Practical and durable bag with space for four grey Celsicom Easy Connect boxes as well as sensors, brackets and other accessories.		390 × 310 × 140 mm	1	7016 6012
Service bag for concrete computer Practical and durable bag designed for the yellow Celsicom Easy Connect box for measuring in concrete. There is space for accessories, such as a 100-metre roll of thermocouple wire.		390 × 310 × 140 mm	1	7016 6036
Bag for alignment instruments Practical bag for storing and transporting the Celsicom V600		270 × 150 × 75 mm	1	0590 0017
Moisture jar Jar of saline solution that maintains a relative humidity, for control and calibration of humidity measuring loggers and instruments. 85 %RH.		–	1	0160 2185
Sealing compound For boreholes. Bostik PV.		6 × 60 cm	1	2460 0004
Tightness tester Rubber bladder for checking the tightness of boreholes.			1	3560 0001
Measuring tube For boreholes when measuring moisture in concrete. 120 mm long.			12	3560 0120
Cable for Celsicom TC603 Cable for hanging the Celsicom TC603 concrete computer.			1	7040 0040
Measuring hook 210 mm long stainless steel hook for measuring during ventilation adjustment with Celsicom V600 (included in the purchase of the instrument).			1	7040 2004
Measuring hose 5 m long, durable silicone hose for pressure measurement during ventilation adjustment with Celsicom V600.			1	0554 0440
Teflon filter That is threaded onto the Celsicom TH601x humidity sensor. Protects the sensor from dust, dirt and free water.		Ytter Ø=11 mm, Inner Ø=8 mm, L= 20 mm	1	7060 6208

For more accessories see nordtec.se

You'll be up and running before you can say "live temperature monitoring".

After these four simple steps, measurement data is collected and sent to Celsiview.



1

If you do not already have an account, you need to create one and then log in.



2

Take off the sliding cover and scan the QR code located on the inside the logger.



3

Add your logs to the basket.



4

Open the shopping basket and pay for the cloud service.



SEE ALL VALUES WHENEVER YOU WANT

All measurement data is gradually sent to the Celsiview cloud service for unlimited storage as long as you have a subscription. On your mobile phone, tablet or computer see up-to-date statistics at any time such as temperature and humidity in different environments.

What are customers saying?

Some voices on connected, smart metering with Celsicom Easy Connect.

"It's easy to enter recipes and keep track of the concrete"

Fredrik Daun, supervisor at HA Bygg, which performs in-situ casting of concrete.

"With Celsicom we can ensure optimal dehydration climate"

Axel Arleij, moisture expert at Raksystems, which monitors building climates and investigates indoor climates.

"We can check on our mobile phones that a dehumidifier is working exactly as it should"

Thomas Karhu, Production Manager at Ocab, which repairs moisture damage in properties.

"The battery life is impressive and the reliability is absolutely outstanding"

Bengt Johansson, Factory Quality & Environmental Manager at Sateba, which manufactures concrete grinders for train tracks.

"We get a good overview and access to both live temperatures and history"

Caroline Andersson, Supply Chain Manager at Lohilo, a manufacturer of protein ice cream.

"I pinpoint the right air values directly, which saves a lot of time"

Tor Halvorsen, ventilation technician at VXPro AB, who has 25 years of experience in the ventilation industry.



Read these customer stories at nordtec.se



Celsicom Easy Connect is distributed in Sweden by Nordtec, specialists in measurement technology since 1976.

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