

COMBI 5000: 5 in 1 pH + EC + AM + VWC + t°



The COMBI 5000 is a universal instrument for the immediate measurement of the most important parameters in plant production, such as pH value, EC value, soil salinity, soil moisture and temperature.

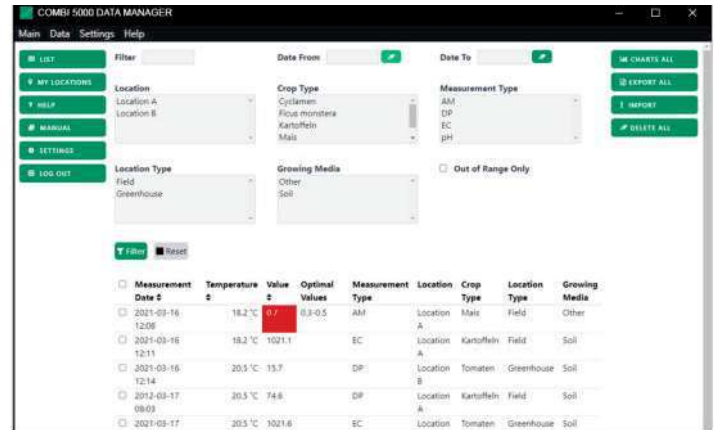
Suitable probes and solutions:

- pH insertion probe (item-no. 10302)
- buffer solution pH 4 (item-no. 31001) and pH 7 (item-no. 31002)
- EC probe with platinum sensors (item-no. 10212)
- standard solution 1.4 mS (item 31003) and 111.8 mS (item 31005)
- multi-probe to measure activity, moisture and temperature, 25 cm

Delivery contents: COMBI 5000 basic unit incl. data logger function, pH insertion probe, buffer solutions pH 4 and pH 7 (100 ml each), EC probe with platinum sensors, standard solutions 1.4 mS and 111.8 mS (50 ml each), multi-probe, 250 mm, piercing pin, spray bottle with snorkel, 250 ml, volume measuring cup, 100 ml, manual with optimal values, transport and storage case.

Item-no.	
10900	COMBI 5000: pH + EC + AM + moisture + temperature, complete case

Data Manager COMBI 5000



Make the most out of your datalogger using the COMBI 5000 Data Manager.

Managing and processing data can be time consuming, therefore we developed the Data Manager platform, which upgrades your COMBI 5000 to the next level. This makes it easy to overview your measurements and plant production processes.

Main features:

- The web platform is accessible anywhere: Whether you are in your greenhouse or in your office, you will be able to check past measurements at any place with internet connection.
- Compatible with the COMBI 5000 series: If you have purchased any COMBI 5000 kit with datalogger, your device is compatible with the new platform.
- Easy upload and data handling: The Data Manager simplifies the serial communication workflow. You can upload all your measurements using the PC program with just one click. On the online platform, it's easy to sort and filter your measurements based on value, type, date or even location.
- Location and crop type management: You can create your own locations and mark where you took the selected measurements. This is great for long term experiments and comparison.
- Optimal values: It is possible to automatically test whether your measured values are optimal for your plants. Set up your crop type and the platform will display which values were within the optimal range based on the COMBI 5000 handbook.
- Spreadsheet export: The Data Manager is able to export directly into .xlsx, which is the most popular format for spreadsheets.

COMBI 5000: 8 in 1 pH + EC + AM + VWC + RH + hPa + t°



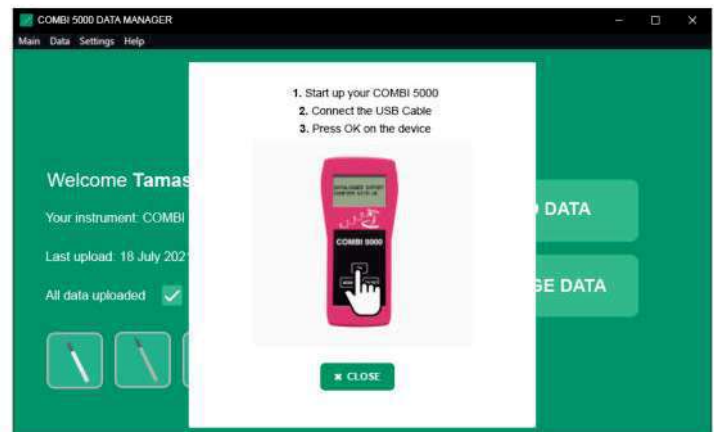
The all-round talent for plant and vegetable production. With the handheld meter COMBI 5000, the growth-relevant parameters such as pH, EC, salinity, soil moisture and temperature, air humidity, temperature and pressure can be determined quickly and precisely.

Suitable probes and solutions:

- pH insertion probe (item-no. 10302)
- buffer solution pH 4 (item-no. 31001) and pH 7 (item-no. 31002)
- EC probe with platinum sensors (item-no. 10212)
- standard solution 1.4 mS (item 31003) and 111.8 mS (item 31005)
- multi-probe to measure activity, moisture and temperature, 25 cm
- HPT probe to measure humidity, temperature and air pressure

Delivery contents: COMBI 5000 basic unit incl. data logger function, pH probe, buffer solutions pH 4 and pH 7 (100 ml each), EC probe, standard solutions 1.4 mS and 111.8 mS (50 ml each), multi-probe (250 mm), HPT probe, piercing pin, spray bottle with snorkel (250 ml), volume measuring cup, 100 ml, manual with optimal values, transport and storage case.

Item-no.	
10920	COMBI 5000: 8 in 1: pH + EC + AM + VWC + RH + hPa + t°, complete case



Expected in June, 2024.

Technical data

COMBI 5000 basic unit (item no. 10910)	
Housing	splash-proof, rugged
Power	9 Volt battery, >400 measurements
Display	alphanumeric, reflective
Switch-off function	automatic, after 4 min
Data logger*	Measuring rate: 1 min - 24 h, Memory: 2620 records
Connector	BNC plug and 8-pin plug
Dimensions	180 x 83 x 55 mm
Weight	300 g
pH probe (item no. 10302)	
Measuring range	0 - 14 pH
Resolution	0.01 pH
Accuracy	± 0.02 pH
Calibration	automatic
Probe	gel-filled insertion probe, 125 mm
Connector	BNC plug
Application	pH measurement directly in soils, substrates and liquids
EC probe (item no. 10212)	
Measuring range	0 - 200 mS/cm
Resolution	0.001 - 0.01 mS/cm
Accuracy	± 2 % from measured value
Calibration	automatic
Probe	plastic with platinum sensors, 125 mm
Connector	8-pin plug
Application	conductivity measurement in liquids, e.g. nutrient and stock solutions
Multi-probe (item no. 10191) salinity - soil moisture - soil temperature	
Probe	PVC, Ø 10 mm
Length	250 mm
Sensors	FDR capacitive (moisture), NTC (temperature), bi-pol (salinity)
t° compensation	automatic
Connector	8-pin plug
Applications	measurement of salinity, temperature, soil and substrate moisture
Activity measurement (salinity)	
Measuring range	0 - 2.99 g/l of active salts
Resolution	0.01 g/l of active salts
Calibration	factory calibration, stable
Temperature measurement	
Measuring range	-10 to +50 °C
Resolution	0.1 °C
Moisture measurement	
Measuring range	0.5 - 60 %VWC
Resolution	0.1 %VWC
Calibration	0%VWC in air / 60%VWC in water
HTP probe (item no. 10130) air humidity – air temperature – air pressure	
Measuring range	10 ... 100 RH% / 260 ... 1260 hPa / -20 ... +80 °C
Resolution	0.1 RH% / 0.1 hPa / 0.1 °C
Accuracy	2% / 0.5 hPa / ±0,2%
Calibration	factory calibration
Connector	8-pin plug
AM probe (item no. 10121)	
Measuring range	0 - 2.99 activity in g/l
Resolution	0.01 activity in g/l
Calibration	factory calibration, stable
Probe	stainless steel with 2-pol-sensor
Probe length	250 mm
Connector	8-pin plug
Application	direct measurement of soil salinity

* Attention: Transmission cable, 8-pin/USB (item no. 90079) is required for this purpose.

Configurations

Item-no.	
COMBI 5000: single-function	
10190	AM 5000, complete case
10290	EC 5000, complete case
10390	pH 5000, complete case
10850	MST 5000, complete case
COMBI 5000: multi-function	
10490	EC + AM 5000, complete case
10590	pH + AM 5000, complete case
10690	pH + EC, complete case
10790	pH + EC + AM, complete case
10890	AM + moisture + temperature, complete case
10892	EC + AM + moisture + temperature, complete case
10895	pH + AM + moisture + ttemperature, compl. case
10900	COMBI 5000: pH + EC + AM + moisture + temperature, complete case
10920	COMBI 5000: pH + EC + AM + VWC + tempetature + RH + hPa + t°, complete case

All devices can be individually configured and the case can be equipped accordingly.

Attention:

Do you want to upgrade your COMBI 5000 for further function? No problem: Combi 5000 is designed for easy retrofitting to additional parameters.

Just tell us the parameters that you want to measure additionally. We will then send you an Upgrade Plug (item-no. 10145) and the desired parameters will automatically be installed in your COMBI 5000. Only the additional measuring probes are then required. Price will be calculated per parameter.

Item-no.	Component parts
10910	COMBI 5000, basic unit
10302	pH insertion probe
31001	Buffer solution pH 4, 100 ml
31002	Buffer solution pH 7, 100 ml
10212	EC probe with platinum sensors
31003	Standard solution 1.4 mS, 50 ml
31005	Standard solution 111.8 mS, 50 ml
10192	Multi-probe: for simultaneous measurement of activity, soil moisture and temperature
10130	HPT probe: for simultaneous measurement of humidity, air temperature and air pressure
10124	Insertion temperature probe
40821	Soil moisture probe
10121	Stainless steel AM probe, 250 mm
10122	Stainless steel AM probe, 500 mm
10123	Stainless steel AM probe, 750 mm
90079	Connection cable 8-pin to USB
23041	Spray bottle with snorkel, 250 ml
90036	Volume measuring cup, 100 ml
90020	Piercing pin
10145	Upgrade plug for additional measuring function of COMBI 5000

Video
how-to-use

