

# Monitoring system

testo 160 IAQ - Monitoring system for temperature, humidity, atmospheric pressure and  $CO_2$  concentration.



Measurement value transfer by wireless LAN to the Cloud store

Measurement values can be called up on all end devices

Alarm notification by SMS or e-mail

Inconspicuous design and small dimensions

Deco-cover for optimum individual adaptation of the logger to the surroundings



The WiFi data logger testo 160 IAQ monitors the ambient conditions temperature, humidity, atmospheric pressure and the CO<sub>2</sub> concentration in buildings such as public facilities, office complexes and education institutions. The logger transfers measurement values by wireless LAN to the online store (Testo Cloud). You can access all data at any time via your normal browser on your PC/tablet/smartphone. If limit values are exceeded, an alarm is immediately provided by SMS and/or e-mail.

Thanks to the optional, individually designable decocover, the logger can be integrated inconspicuously in buildings. The testo 160 IAQ thus enables you to check all relevant ambient conditions and fulfil the obligation of documentation.



### The testo 160 Cloud

#### Our packages

The testo 160 Cloud is the central operating element of the testo 160 monitoring system. Here you can configure your WiFi data loggers, set limit value alarms and analyze measurement data. You must first register at www.saveris2.net to have access to the testo 160 Cloud.

Depending on the range of functions you require, you have a choice between the free Basic and the more extensive Advanced functionality.

	Basic		Advanced	I
Measuring cycle	15 min. to 24 h	1 min. to 24 h (Battery mode: 5 min to 24 h)		
Communication cycle	15 min. to 24 h	1 min. to 24 h (Battery mode: 5 min to 24 h)		
Data storage	Max. 3 months	Max. 2 years		
Reports	Manual (.pdf/.csv)	Manual (.pdf/.csv) Automatic (.pdf/.csv)		
Data analysis	For one measurement site each (external probes count as measurement sites)	For up to 10 measurement channels simultaneously		
Number of users per account	1	10		
Number of WiFi data loggers per account	Unlimited	Unlimited		
Alarm options	Upper/lower alarm limits	Upper/lower alarm limits		
System notifications	<ul><li>Notification of low battery</li><li>Radio link interrupted</li><li>Power supply interrupted</li></ul>	<ul><li>Notification of low battery</li><li>Radio link interrupted</li><li>Power supply interrupted</li></ul>		
E-mail alarm	Yes	Yes		
Multiple recipients for alarm e-mails	Yes (up to 3)	Yes (unlimited)		
SMS alarm	No	Including 25 SMS per logger and year     More SMS packages purchasable		
		12-month licence order no. 0526 0735	24-month licence order no. 0526 0732	36-month licence order no. 0526 0733



## Ordering data/technical data

### testo 160 IAQ

testo 160 IAQ WLAN air quality logger with display and built-in sensors for temperature, humidity, CO<sub>2</sub> and atmospheric pressure, including free cloud access (Basic functionality), USB cable, batteries (4 x AA Alkaline-Manganese), wall bracket including unlocking tool and adhesive strips, QR code sticker, calibration protocol and short instructions



Order no. 0572 2014

## Accessories

	Order no.	
Deco-cover for testo 160 IAQ	0554 2012	
Wall bracket for testo 160 IAQ	0554 2015	
Alkaline manganese mignoncell AA batteries up to -10 °C, order 4 off	0515 0414	
Mains unit for testo 160 radio data logger	0572 2020	
ISO calibration certificate temperature +15 °C, +25 °C, +35 °C	0520 0172	
ISO calibration certificate humidity at +25 °C, humidity points 11.3 %RH and 75.3 %RH	0520 0076	
ISO calibration certificate CO <sub>2</sub> , calibration points 0; 1000; 5000 ppm	0520 0033	

Temperature measur	ement	
Measuring range	0 to +50 °C	
Accuracy	± 0.5 °C	
Resolution	0.1 °C	
Humidity measureme	nt	
Measuring range	0 to 100 %RH (non-condensing)	
Accuracy	±2 %RH at +25 °C and 20 to 80 %RH ±3 %RH at +25 °C and < 20 %RH and > 80 %RH ±1 %RH hysteresis ±1 %RH / year drift	
Resolution	0.1% RH	
CO <sub>2</sub> measurement		
Measuring range	0 to 5,000 ppm	
Accuracy	±(50 ppm + 3 % of m.v.) at +25 °C Without external power supply: ±(100 ppm + 3 % of m.v.) at +25 °C	
Resolution	1 ppm	
Pressure measureme	nt	
Measuring range	600 to 1100 mbar	
Accuracy	±3 mbar at +22 °C	
Resolution	1 mbar	
WLAN		
Standard	802.11 b/g/n	
Security	WPA2 Enterprise: EAP-TLS, EAP-TTLS-TLS, EAP-TTLS-MSCHAPv2, EAP-TTLS-PSK, EAP-PEAP0-TLS, EAP-PEAP0-TLS, EAP-PEAP0-PSK, EAP-PEAP1-TLS, EAP-PEAP1-MSCHAPv2, EAP-PEAP1-PSK, WPA Personal, WPA2 (AES), WPA (TKIP), WEP	
General		
General Operating temperature	0 to +50 °C	
	0 to +50 °C 0 to +50 °C	
Operating temperature		
Operating temperature Storage temperature	0 to +50 °C	
Operating temperature Storage temperature Protection class	0 to +50 °C  IP20  Dependent on Cloud licence  Basic: 15 min to 24 h  Advanced: 1 min to 24 h /	
Operating temperature Storage temperature Protection class Measuring cycle	0 to +50 °C  IP20  Dependent on Cloud licence Basic: 15 min to 24 h Advanced: 1 min to 24 h / with battery operation: 5 mins to 24 h  Dependent on Cloud licence Basic: 15 min to 24 h	
Operating temperature Storage temperature Protection class Measuring cycle Communication cycle	0 to +50 °C  IP20  Dependent on Cloud licence Basic: 15 min to 24 h Advanced: 1 min to 24 h / with battery operation: 5 mins to 24 h  Dependent on Cloud licence Basic: 15 min to 24 h  Advanced: 1 min to 24 h	
Operating temperature Storage temperature Protection class Measuring cycle Communication cycle Memory	0 to +50 °C  IP20  Dependent on Cloud licence Basic: 15 min to 24 h Advanced: 1 min to 24 h / with battery operation: 5 mins to 24 h  Dependent on Cloud licence Basic: 15 min to 24 h Advanced: 1 min to 24 h  32,000 readings (sum of all channels)  LED traffic light function green, amber, red (in battery mode, the traffic light only lights up during the measurement. When using the USB mains unit, the traffic light	
Operating temperature Storage temperature Protection class  Measuring cycle  Communication cycle  Memory  Alarm function  Voltage supply (alternatively mains unit via USB	O to +50 °C  IP20  Dependent on Cloud licence Basic: 15 min to 24 h Advanced: 1 min to 24 h / with battery operation: 5 mins to 24 h  Dependent on Cloud licence Basic: 15 min to 24 h Advanced: 1 min to 24 h  32,000 readings (sum of all channels)  LED traffic light function green, amber, red (in battery mode, the traffic light only lights up during the measurement. When using the USB mains unit, the traffic light function is permanently active.)	
Operating temperature Storage temperature Protection class  Measuring cycle  Communication cycle  Memory  Alarm function  Voltage supply (alternatively mains unit via USB connection)  Battery life (depending on the measuring and communication cycle	O to +50 °C  IP20  Dependent on Cloud licence Basic: 15 min to 24 h Advanced: 1 min to 24 h / with battery operation: 5 mins to 24 h  Dependent on Cloud licence Basic: 15 min to 24 h Advanced: 1 min to 24 h  32,000 readings (sum of all channels)  LED traffic light function green, amber, red (in battery mode, the traffic light only lights up during the measurement. When using the USB mains unit, the traffic light function is permanently active.)  4 x AA alkaline manganese batteries 1.5 V	





