

# Monitoring system

testo 160 IAQ - Monitoring system for temperature, humidity, atmospheric pressure and CO<sub>2</sub> 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  $\mathrm{CO}_2$  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 with the testo Saveris 2 App or by PC/tablet/smartphone and a normal browser. 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

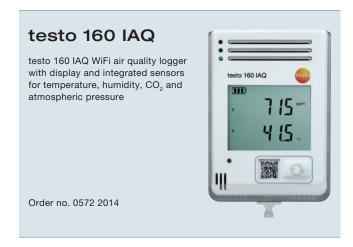
The testo 160 Cloud is the central operating element of the testo 160 monitoring system. Here you can configure your WiFi data loggers, set limit value alarms and analyze measurement data. You must first register at www.saveris2.net to have access to the testo 160 Cloud.

Depending on the range of functions you require, you have a choice between the free Basic and the more extensive Advanced functionality: In both packages, you have access to an API interface, in order to export measurement data to your systems.

	Basic	Advanced
Measuring cycle	15 min. to 24 h	1 min. to 24 h
Communication cycle	15 min. to 24 h	1 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 channel in each case	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     Alarm delay     Time control of alarms
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
SMS alarm	No	Including 25 SMS per logger and year     More SMS packages purchasable
		12-month         24-month         36-month           licence         licence         licence           order no.         order no.         0526 0732         0526 0733



## Ordering data/technical data



## **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
External USB power supply	0572 2020
ISO calibration certificate temperature -8 °C, 0 °C, +40 °C	0520 0171
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		
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-MSCHAPv2, EAP-PEAP0-PSK, EAP-PEAP1-TLS, EAP-PEAP1-MSCHAPv2, EAP-PEAP1-PSK, WPA Personal, WPA2 (AES), WPA (TKIP), WEP	
General		
Operating temperature	0 to +50 °C	
Storage temperature	0 to +50 °C	
Protection class	IP20	
Measuring cycle	Dependent on Cloud licence Basic: 15 min to 24 h Advanced: 1 min to 24 h	
Communication cycle	Dependent on Cloud licence Basic: 15 min to 24 h	
Communication cycle	Advanced: 1 min to 24 h	
Memory	Advanced: 1 min to 24 h 32,000 readings (sum of all channels)	
Memory Voltage supply (alternatively mains unit via USB	32,000 readings (sum of all channels)	
Memory  Voltage supply (alternatively mains unit via USB connection)  Battery life (depending on the measuring and communication cycle	32,000 readings (sum of all channels)  4 x AA alkaline manganese batteries 1.5 V	



### Data management

### The testo Saveris 2 App

With the testo Saveris 2 App for iOS and Android, you now operate the wireless LAN data logger system testo 160 even more easily and flexibly.

#### More efficient commissioning\*:

- Easy recognition and selection of the WiFi network
- Faster parallel commissioning of several loggers

#### Easy network analysis\*:

- Test the strength and range of your WiFi network
- Create and send status reports

#### Reliable alarm functions:

- Push notifications of limit value violations
- Combinable with e-mail or SMS alarms

\*These functions are available only in the Android version of the testo Saveris 2 App.



