

TESTO 350 SYSTEM

The testo 350 is now available with Bluetooth® Module – a NEW Wireless Communication Solution for emission analysis

The new testo 350 Bluetooth system is the perfect solution for applications that require maximum flexibility, such as stack-work in complex industrial facilities. The main advantage of using wireless module is that the operator can carry out flue gas measurement easily, safely and comfortably at a distance, without an additionally cable between the Control Unit and Flue Gas Analyser. The Control Unit which displays the measurement data becomes truly remote, operating the analyser wirelessly at distances of up to 100m from the sample point.

CONNECTIVITY: testo 350 Bluetooth® options may be used to transfer analytical methods and results either between a testo 350-S or -XL Analyser Box and testo 350-S Control Unit or a testo 350-S or -XL Analyser Box and a PC or Laptop computer running testo easyEmission software. Diagram 1 below shows the connectivity options.

The testo 350 combines ease of use and Bluetooth® technology to bring you many advantages including:

- Increased safety – the operator can be remote from analyser and hot areas, with no cables as tripping hazards.
- Space is saved – in operation, storage and transport by the elimination of cables and optimisation of analyser-hose length.
- Reduced costs – long sample hoses can be eliminated optimising sample-transfer and response times as well as pump requirements, reducing risk of damage and wear, and minimising long term service costs.
- Cable damage eliminated – damage due to sharp edges or heat is a thing of the past, saving hassle and unnecessary costs.
- Additional range – distance limitations of USB or RE232 interfacing are removed with Class 1 Bluetooth® 2.0 offering a range of 100m in free field.



Diagram1: testo 350 Bluetooth® Connectivity

testo 350 Bluetooth® Version 2.0 FAQ

Q: What is Bluetooth?

A: Bluetooth is a specification for the use of low-power radio communications to wirelessly link phones, computers and other network devices over relatively distances. Wireless signals transmitted with Class 1 Bluetooth devices typically cover distances up to 10 meters or more free field [line of sight]. Devices communicate via Bluetooth using protocols that are part of the Bluetooth specification.

Q: What is the communication range of the testo 350 with Bluetooth modules [between Control Unit and Analyser Box, or Analyser Box and PC/Laptop]?

A: Up to 100 metres in free field.

Q: Is it possible to fit Bluetooth® to the testo 350-XL Control Unit?

A: No. Only testo 350-S Control Unit may be optioned with a Bluetooth® module. Either the “S” or “XL” Analyser Box may be Bluetooth® optioned for communication with a compatible controller or PC/Laptop with testo easyEmission Software.

Q: But I need the testo 350-XL Control Unit because of its other functions. What can I do?

A: Although the XL Control Unit can not be fitted with a Bluetooth® module, its analyser box [-S or -XL] can. Thus the analyser may be controlled, and data collected via a PC with Bluetooth® and easyEmission. The proviso is that the XL Control Unit must be switched off to allow Bluetooth® pairing between the analyser and the PC.

Q: How do I connect Control Unit and Analyser Box using Bluetooth?

A: During first commissioning, or if the Control Unit has not been “docked” with an analyser, the Control Unit searches for flue gas analyser in the vicinity. Once a flue gas analyser has been found, the Control Unit and Analyser Box are automatically wirelessly connected. If several flue gas analysers are found, the addresses are displayed so that one can be selected. Multiple analysers may be selected, programmed and started one-at-a-time. Results [stored in the analyser’s memories] may be collected in the same sequential fashion.

Q: Should I search for a Bluetooth® connection every time when the unit is switched on?

A: No, that is not necessary. Once a connection has been set up, the system automatically switches to Bluetooth® as soon as the Control Unit is separated from the analyser.

Q: Will the bus address be changed if I use the Bluetooth® option in a system set up and running via the Testo databus system?

A: Yes. When using the Bluetooth® option, the bus address is changed immediately once the Bluetooth® connection is active.

Q: Do I need additional PC software to work with the Bluetooth®?

A: The testo 350 Bluetooth® **Analyser Box** option will communicate with a Bluetooth® - capable PC or laptop running testo easyEmission software. If you have purchased or upgraded to easyEmission Version 2.1, you do not need any additional software, as this version supports testo 350 Bluetooth®. If you have easyEmission Version 2.0, you can get a free update to Version 2.1 from testo Download Centre, accessible from testo Australian website: [www.testo.com.au → “Service & Support” → “Download Centre” → “International Website” → “PC software testo easyEmission”].

Q: How do I use my computer with the testo 350 with the Bluetooth®?

A: A Bluetooth equipped PC or Laptop will find the testo 350-S and -XL analysers if they are powered and in range, and “return” their address numbers. When easyEmission is started, an analyser may be selected using its address, then set up and started from the software. Additional analysers may be set up, and results uploaded, using the “sequential” process. An analyser may not be simultaneously linked via Bluetooth® to a computer and a testo 350-S controller.

Q: Do Microsoft Window XP and Vista support Bluetooth®?

A: Windows XP Service Pack 2 and later releases have native [built-in] support for Bluetooth. Previous version required users to install the necessary Bluetooth adapter’s own drivers, which are not directly supported by Microsoft. Windows Vista also includes built-in Bluetooth support. Microsoft has not released an official Bluetooth stack for older Windows versions, such as Windows 2000 or Windows Me.

Q: Will my computer need additional hardware?

A: A few desktop computers and most recent laptops come with a built-in Bluetooth adapter, and others will require an external one in the form of a dongle (please refer Diagram 2). If your computer is equipped with Bluetooth you should ensure that the transceiver has an adequate [100m] range, otherwise a dongle may still be necessary.



Diagram 2: A typical Bluetooth USB dongle

Q: Can I use a Mac?

A: Sorry, no. Although Apple has supported Bluetooth since Mac OS X v10.2 [which was released in 2002], you cannot run testo easyEmission on a Mac.