

# **WinGuard System Requirements**

## **Updated 2.2015**

The following hard- and software requirements apply:

## **Client/Operator Station:**

- Intel Core i5 3,0 GHz (or similar)
- 4 GB RAM
- Hard disk drive 250 GB
- Graphics adapter: 2x DVI, min. 1680 x 1050
- 22" Screen
- Soundcard, speakers
- Keyboard and mouse or touch screen
- USB Ports for WIBU Dongle (optional), Keyboard and mouse
- COM (serial "RS232" interface optional)
- LAN (100MBit/s or 1000MBit/s, Cat. 5e or higher, RJ45)
- Operating systems
  - o Windows 7 Professional, Ultimate or Enterprise (SP1) 32/64 Bit
  - o Windows 8/8.1 Professional, Ultimate or Enterprise 32/64 Bit

## Server/Hot-Standby:

- Intel Xeon-Core 2,6 GHz (Quad-Core or similar)
- 4 GB RAM
- Hard disk drive 500 GB (Redundant via Raid 1 o. 5)
- Graphics adapter: 1x DVI, min. 1280 x 1024
- 19" Screen or remote access
- Keyboard and mouse or remote access
- USB Ports for WIBU Dongle (optional), Keyboard and Mouse
- COM (serial "RS232" interface optional)
- LAN (100MBit/s or 1000MBit/s, Cat. 5e or higher, RJ45)
- Operating systems
  - Windows Server 2003 (R2) 32/64 Bit \*, \*\*
  - o Windows Server 2008 (R2) 32/64 Bit
  - o Windows Server 2012 (R2) 32/64 Bit

### **Anti-Virus Software:**

Using Anti-Virus software can cause interferences between the access from WinGuard and access from Anti-Virus software to critical system files. Therefore access can be blocked or delayed. We suggest taking precautionary measures (e.g. adding the WinGuard files/folders to the exclusion list of the Anti-Virus software).

<sup>\*:</sup> Not all functionalities are supported.

<sup>\*\*:</sup> Support ends in July 2015



#### **Interface Server:**

The interface server specification is depending on the connected systems. In many cases an embedded PC can be used for a remote connection of a single system.

#### Virtual Machines:

WinGuard has been designed to run on dedicated hardware under a Windows operating system. A virtualization of the hardware by hardware emulation/hardware virtualization or para-virtualization is possible subject to the following restrictions.

## 1. System restrictions

As WinGuard is, depending on the project, using numerous interface modules to connect the hard- and software of third party manufacturers, it has to be ensured that all components linked to the total system are functional in a (partly) visualized environment.

For serial connections it has to be ensured that the connection has to be similar to real hardware, e.g. with regard to the timing behavior for sending/receipt of telegrams.

Advancis Software & Services GmbH cannot give any binding information with regard to the virtualization characteristics of any connected third party system. Problems might occur especially upon switching the VM for load balance or high availability purposes. To ensure high operation reliability it is recommended to use the proprietary Hot-Standby system of WinGuard instead.

#### 2. License restrictions

If WinGuard software licenses are used please note that the hardware specifications of the used virtual machine have to be invariable as otherwise a new activation of the software license will be necessary. The linkage to the system hardware is established based on two factors:

- Serial number of the system drive
- MAC address of the primary network adapter

As it depends on the applied virtualization system which actions lead to a system hardware change of the host system, it is not possible to provide further information with regard to the general possibility to copy/switch the host system between different hosts without a new activation.

If the system hardware of the host system is changed regularly, a hardware dongle should be used to avoid required reactivation efforts.

#### Notes:

In order to use WinGuard, especially the "Watch-Dog"-function, write/read permissions for the program directory are required. This may go along with the configuration of the user account control of Windows 7 (or more recent) and Windows Server 2008 (or more recent).

A binding statement about the compatibility of the used operating system in combination with the installed software components of other manufacturers cannot be given by Advancis but only by the respective manufacturers.