

The logo graphic consists of a series of parallel lines that form a stylized 'V' shape on the left, which then transitions into a horizontal line extending across the top of the page.

***VOLTcraft***<sup>®</sup>

**GEIGER COUNTER**  
**"Gamma Check Pro"**

Ⓒ OPERATING INSTRUCTIONS FOR THE SOFTWARE

Item no.  
1377508

VERSION 11/15

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# 1. FUNCTIONS OF THE SOFTWARE

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- Suitable for the Geiger counter "Gamma Check Pro"
- Display of the current, maximum and 24h values and the result of the last measurement
- Reading and deleting the data records in the device memory
- Graphical illustration of the progress of the dosimeter/counter/pulse rate print function for measuring protocols
- Saving and loading the records
- Export of the recorded data to Excel (from Excel 2010)
- Export of the recorded data as CSV file (Comma Separated Values) to read into all common spreadsheet programs
- Starting and ending measurements
- Configuration of the device (time/date, interval of the data recording, etc.)

## System Prerequisites

- Windows from Version 7 onwards
- .Net Framework V4.0 (Client Profile)
- Resolution min. 1280 x 720

# 2. SOFTWARE/DRIVER INSTALLATION

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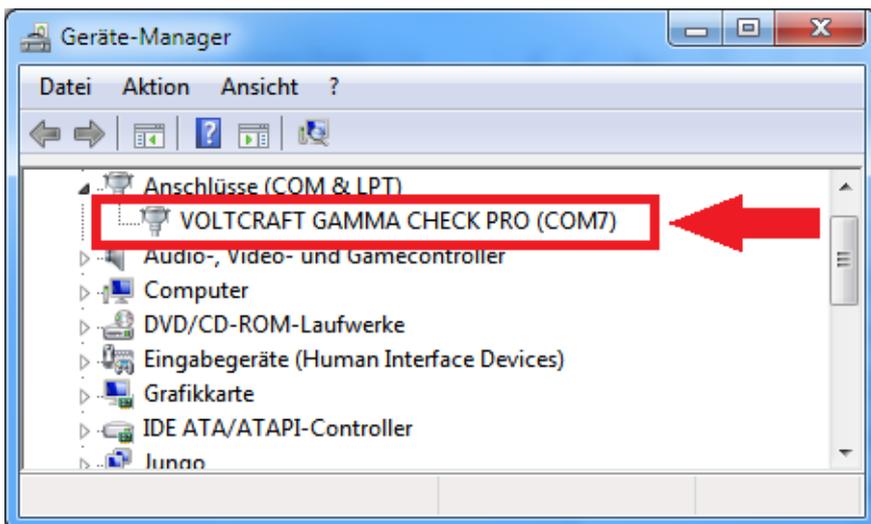
Start the program "GCP-Vx.xx Setup.exe" and follow the instructions of the software or of Windows.

The setup software suggests the directory "Gamma Check Pro" for installation and copies the files needed into the selected directory. The installation programme also creates a programme group "Gamma Check Pro" under "Programmes" and a link on the desktop.

➔ Before you connect the Geiger counter "Gamma Check Pro" to the computer, always install the driver software according to the instructions of the installation program first.

Then connect the Geiger counter "Gamma Check Pro" to a free USB port on your computer. For this, the device has a miniature USB interface on the right side.

Windows recognises the new hardware when it is connected for the first time and completes the installation of the required drivers. In the system control of Windows, Device Manager, you can check which COM port has been assigned to the Geiger counter "Gamma Check Pro" (e.g. "COM7", see the following figure).

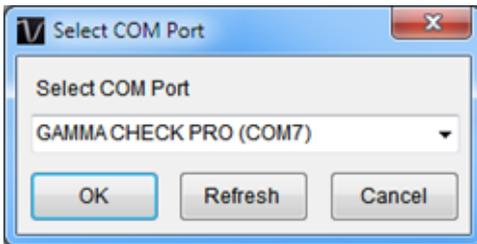


The software installation is now complete.

### 3. GETTING STARTED

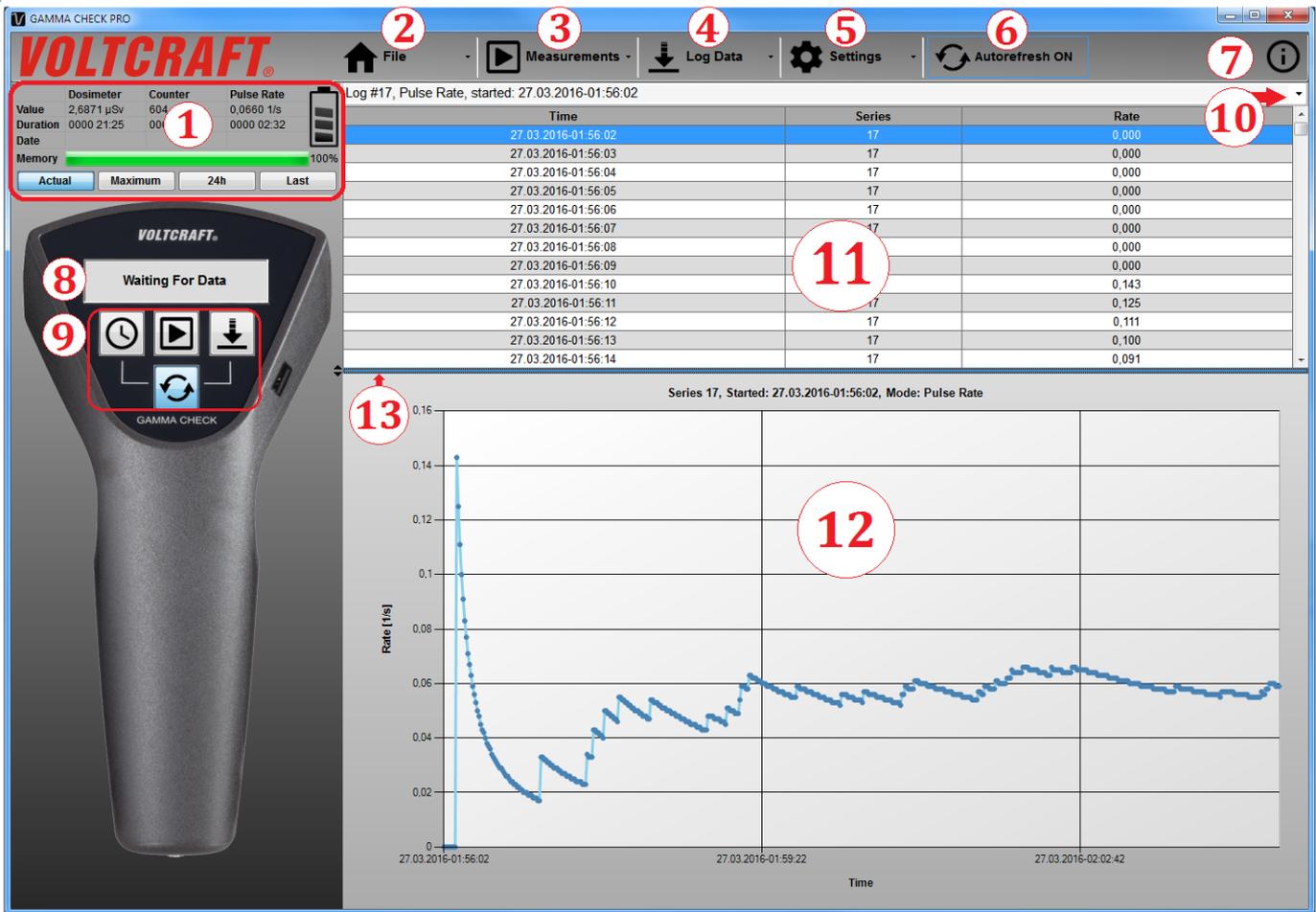
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At the first start of the software, the COM port of the Geiger counter "Gamma Check Pro" must be selected according to the entry in the device manager (in this example: "COM7").



This setting can be changed later under "Settings->COM-Port".

## 4. OPERATION OF THE SOFTWARE



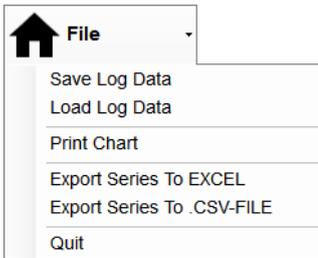
- 1 Display of the measured values: Can be switched between current measurement, maximum values, average values of the last 24 hours and results of the last measurements. The current charging condition of the rechargeable battery and association of the device memory are also displayed.
- 2 "File": Saving and loading of recorded, printing measuring protocols, exporting data to Excel or ".CSV-file"
- 3 "Measurements": Starting or ending measurements, resetting the maximum/24 hours average values or deleting the results of the last executed measurement
- 4 "Log-Data": Reading/deleting the records saved in the device memory of the Geiger counter "Gamma Check Pro"
- 5 "Settings": Selection of the COM port/synchronisation of time with the PC (only possible when no measurement is running), device settings and illustration types of the data (chart/table/both at once)
- 6 "Autorefresh": Pause/continue updating of the value display (see 1.)
- 7 "Info": Display of the program and firmware version
- 8 "Status": Display of the data communication between the software and the Geiger counter "Gamma Check Pro"
- 9 Quick access to frequently needed functions (time synchronisation; start/stop of measurements; reading of the records/pause/continue updating of the value display)
- 10 Selection field for the displayed record
- 11 Illustration of the selected record in table form
- 12 Graphical display of the respective record as line chart
- 13 Movable bar to change the structure between table and chart illustration

### General Notes:

- The export functions for "Excel" and ".CSV" refer only to the currently selected record.
- The charts are printed out as shown on the screen. I.e. when one section has been enlarged, this enlarged view is issued as well. Insertion of a title line with indication of the number of recording, start time and mode are performed automatically. The recommended print format is DIN A4 or DIN A3.
- Saving and loading data via "File" -> "Load Log Data" or "Save Log Data" refers to data from all records loaded from the device memory.

## 5. MENU "FILE"

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Here, records can be saved, loaded, exported or printed.

"Save Log Data"	Saving the record. This refers to all measuring series loaded from the device memory.
"Load Log Data"	Loading saved records
"Print Chart"	Print function for a measuring protocol (number and start time of the record, type of measurement and chart as currently shown on the screen) of the selected measuring series
"Export Series to EXCEL"	Export of the measured data to "Excel" (prerequisite: At least "Excel 2010" or higher)
"Export Series to .CSV-File"	Saving the selected measurement as a .CSV file (= "Comma-separated values")
"Quit"	Exiting the software

## 6. MENU "MEASUREMENTS"

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Measurements can be started and ended here.

The corresponding input field can be reached in "Measurements->Start/Stop Measurements" or by quick access field.

The screenshot shows a settings menu with three sections: Dosimeter, Counter, and Rate. Each section has a table of settings.

Dosimeter					
Endless	Days	Hours	Minutes	Limit [ $\mu$ Sv]	Measurement
<input type="checkbox"/>	1	0	0	10,000	ON

Counter					
Endless	Days	Hours	Minutes	Limit [Ticks]	Measurement
<input checked="" type="checkbox"/>	0	0	0	500000	ON

Rate					
Endless	Days	Hours	Minutes	Limit [1/s]	Measurement
<input type="checkbox"/>	0	2	0	10,000	OFF

At the bottom of the menu are two buttons: "Cancel" and "Ok".

The three measurement dosimeter/counter/pulse rate can be configured individually. After clicking "OK", the set parameters are transferred to the device.

**Duration of the measurement** Selection of "Endless" leads to an endless measurement. Alternatively, a temporary measurement can be selected.

**"Limit"** Sets the limit from which onwards the device issues an acoustic alarm.

**"Measurement"** When the corresponding button is set to "ON", this means that the measurement is active or started when you click "OK". Accordingly, "OFF" means that the respective measurement is inactive or the measurement is stopped after transmission of the parameters to the device.

## 7. MENU "LOG-DATA"

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In this function, you can read records in the device memory and delete them.

The screenshot shows a menu with a downward arrow icon and the text "Log Data". Below it are two options: "Download Logs" and "Clear Stored Log Data".

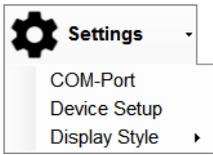
**"Download Logs"** Reading the measuring series saved in the device memory of the Geiger counter "Gamma Check Pro"

**"Clear Stored Log Data"** Deleting the measuring series recorded in the device memory of the Geiger counter "Gamma Check Pro"

# 8. MENU "SETTINGS"

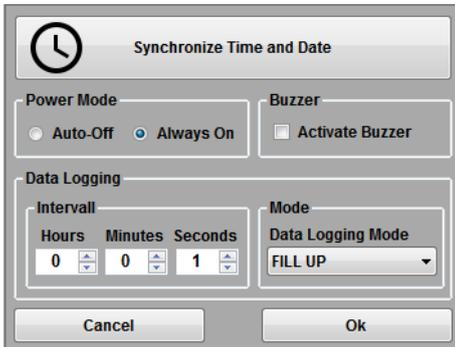
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Various settings can be made here.



- "COM-Port" Selection of the COM port through which the connection to the Geiger counter "Gamma Check Pro" is established
- "Device Setup" Device configuration of the Geiger counter "Gamma Check Pro"
- "Display Style" Setting the data display (table display, chart display or both displays at the same time)

## Subfunction "Device Setup" (device configuration)



- "Synchronize Time and Date" The set time and date of the Geiger counter "Gamma Check Pro" are adjusted to the Windows system time.
- "Power Mode" "Auto-Off" means that the display will switch off on its own after approx. 30 seconds. The Geiger counter "Gamma Check Pro" continues to work in the background. In operating mode "Always-On", the display is always on.
- "Buzzer" With "Activate Buzzer", the installed signal encoder can be switched on and off. When the signal encoder is off, neither pulses nor pushes of buttons are acoustically confirmed. All other signals cannot be deactivated for reasons of safety!
- "Interval" Setting of the scan rate for saving the files in the device memory
- "Mode" Setting of how the storage is to be used.  
For "FILL UP", data will be saved until the entire storage space is used.  
At "ENDLESS", the recording will run in an endless loop. The current data are always saved and, if required, the oldest data will be overwritten (ring memory).  
For "OFF", no data will be recorded.

# 9. DISPLAY OF THE MEASURED VALUES

## Selection of the measurement

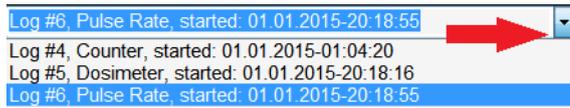
After the device memory has been read ("Log-Data->Download Logs"), the desired measurement can be selected.

Log #6, Pulse Rate, started: 01.01.2015-20:18:55

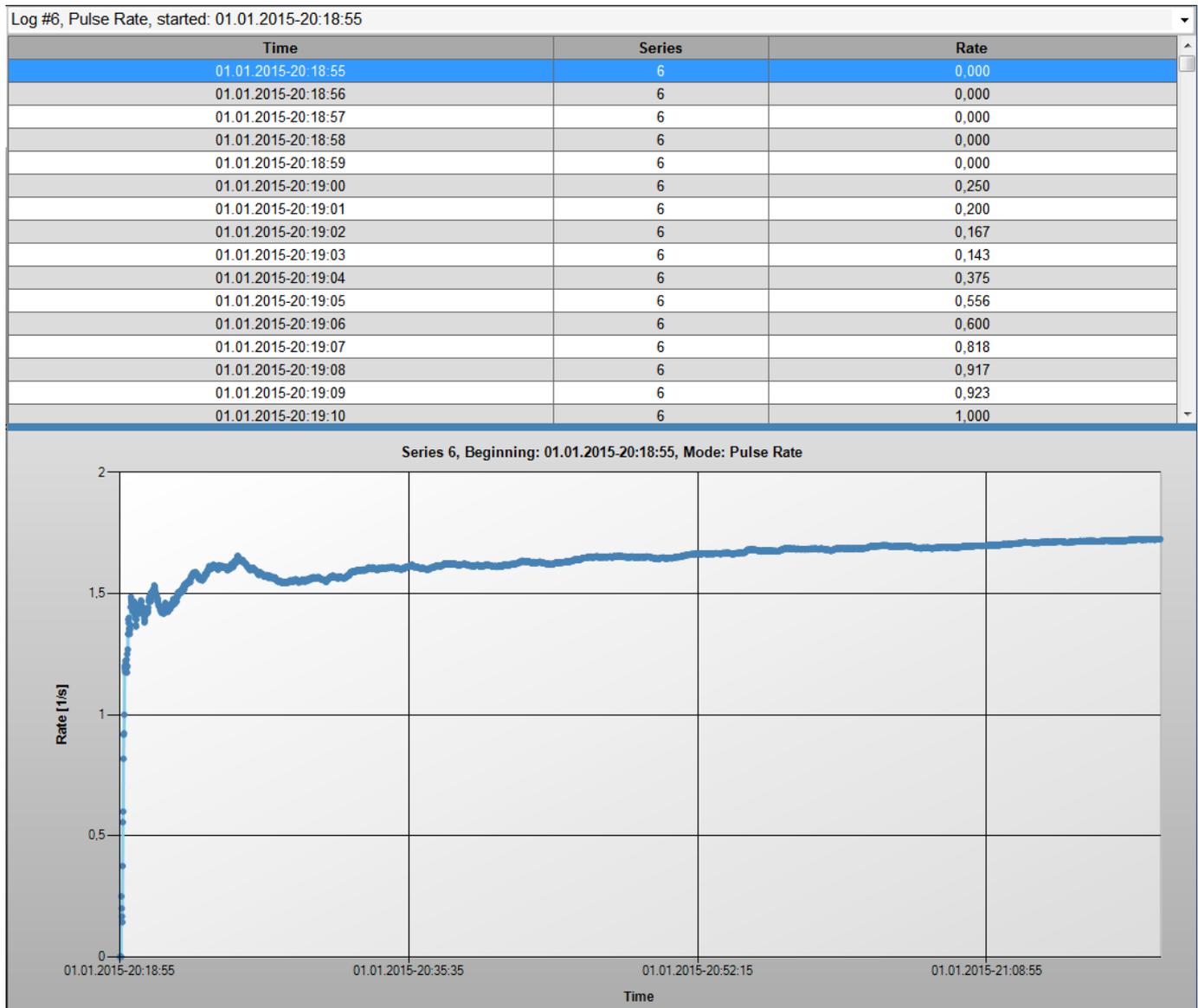
Log #4, Counter, started: 01.01.2015-01:04:20

Log #5, Dosimeter, started: 01.01.2015-20:18:16

Log #6, Pulse Rate, started: 01.01.2015-20:18:55



Then the selected measuring series is loaded into the table and chart illustration and may be evaluated.



## Using the Windows clipboard

In addition to the export functions, there also is the option of exporting the recorded data into any spreadsheet programs, such as "Excel" or "LibreOffice Calc/OpenOffice Calc" via the Windows clipboard.

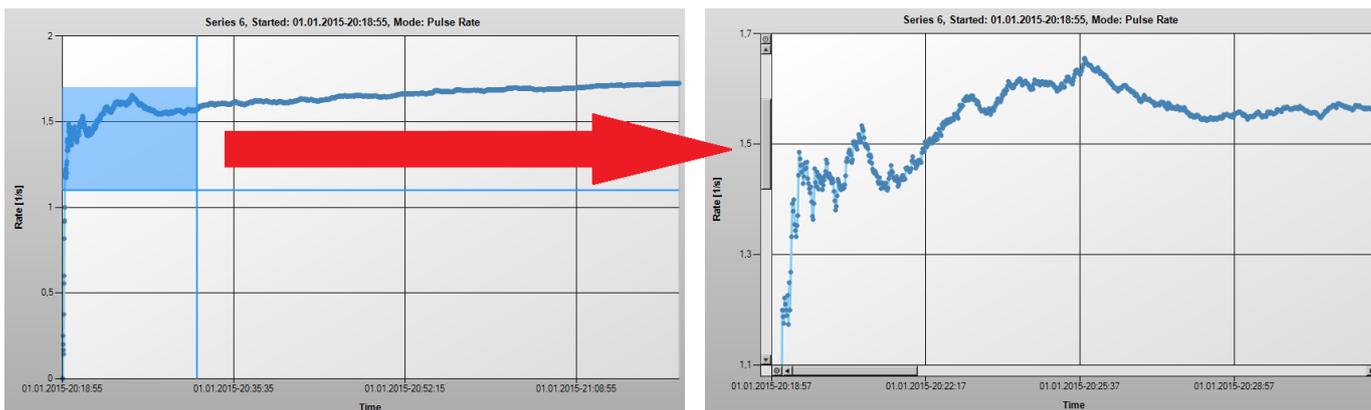
Procedure:

1. Select the desired lines in the table.
2. Right-clicking the table will bring up a selection option (see figure on the right).  
"Copy To Clipboard" = The selected area is copied to the clipboard  
"Copy All to Clipboard" = The entire active table is copied to the clipboard  
Alternatively, there also is the option of saving the selected area by key shortcut "CTRL+C" (copy).
3. These data can be transferred to the target table by the key command "CTRL+V" (insert).



# 10. OPERATION OF THE CHART FUNCTION

## Enlarging to specific areas "Zoom" by mouse:



Keep the left mouse button pushed in the graphical view and pull a frame over the desired area. After releasing the mouse button, the display will be enlarged to the selected area.

Alternatively:

- Right-clicking in the area of the chart will bring up a selection option (see figure on the right).  
"Zoom In" = Enlarge by half the record  
"Reset Zoom" = Back to the overall view
- Depending on the pointer position of the mouse, the scroll wheel may also be used to change.



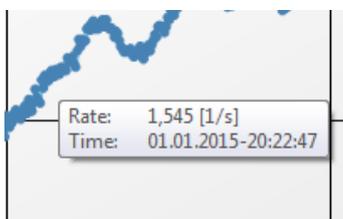
## Moving the illustrated areas

This is possible via the cursor buttons or the picture scroll bars at the charts.

Further control options via the keyboard are:

"Pos1" ("Home")	Restore overall view (like "Reset Zoom")
"Del"	Jump to the start of the recording
"End"	Jump to the end of the recording
"Backspace"	Reset zoom by one level
"PgUp"	X-axis in large steps towards the end
"PgDn"	X-axis in large steps towards the beginning

## Display of data at the mouse pointer position



If the mouse pointer is on one of the illustrated curves, pushing the right mouse button will return the current value at that time.

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