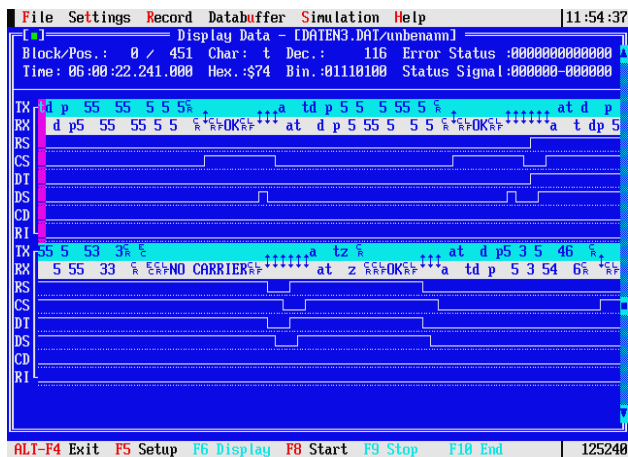


# sioCHECK® 3

➔ **Data analysis, Fault diagnosis and Simulation for RS232, RS485, RS422, TTY (20 mA) ...**



**sioCHECK®** is a software tool for analyzing data, and also for the registry and simulation of data on asynchronous serial lines (RS232, RS485, RS422, TTY). **sioCHECK®** can „monitor“ the transfer of data between two serial-connected communication devices. The data will be continuously displayed and can be stored and analyzed. **sioCHECK®** is able to determine the transfer parameters on its own.

In addition to the possibility of long-term recording, **sioCHECK®** is able to acquire data through means of trigger conditions, because a trigger is able to be set for a certain event. Therefore, extremely rare faults can be displayed and later analyzed. Naturally, detailed expressions of the displayed data can be produced.

With an editor you can create your own simulation programs, which makes **sioCHECK®** an independent participant in the communication process.

The capture of the status lines as well as the registration of the data time, accurate to 1 µs, makes possible the precise analysis of time-critical applications.

In contrast to other potential solutions, **sioCHECK®** clearly has the decisive advantage because it captures the communicated data over the serial COM-ports of a PC. Other than a "monitoring cable", no additional hardware is required.

**sioCHECK®** is a tried-and-tested tool that quickly delivers your desired results. **sioCHECK®** is an indispensable tool for development, construction, installation, technical service and training.

## Fields of application

- Fault diagnosis on serial data lines
- Detection of sporadic transmission errors
- Protocol-analysis of serial connections
- Simulation of serial communications participants
- Long-term recording
- Development, installation, technical service and training

## Performance Features

- Capture of data through the simple connection of an adapter cable into the serial lines
- Auto-Setup: automatic setting of the transmission parameters
- Capture of bi-directional data transfer between transmitter and receiver
- Online representation of data
- Long-term registry up to 16 million characters
- Maximum baud rate of 115,200
- Timing analysis accurate to 1 µs
- The level of status lines RTS, CTS, DTR, DSR, DCD and RI can be displayed graphically.
- Display possibilities of ASCII, HEX, decimal, binary
- Check-sum calculation through CRC16, CRC-CCITT, X/Y/Z-Modem, CRC32, 3964R-BCC
- Representation of control characters
- Definable code table (ASCII, EBCDIC ...)
- Start- and end trigger with varied trigger conditions (signal changes, data errors, time ...)
- Data errors clearly marked in color
- Searches for data errors, status changes or character strings
- Registry of absolute and relative time
- Time and character statistics
- 16550 FIFO-support
- Extensive printing possibilities
- Optional: Converter for TTY, RS 422, RS 485 ...
- Simulation:
  - Your own editor with an easy to learn programming language (similar to BASIC/PASCAL)
  - Directly executable simulation programs with loops, jumps, variables, data editing, calculation functions, as well as special commands for the transmission and receiving of data
  - Transmission of one line of text, a file, or of a marked block in the data buffer (e.g. embedded in STX/ETX or 3964R-protocol)
  - Execution of a simulation at the beginning of the program
  - Start of the simulation possible through a trigger

## System requirements:

PC, 386 or higher  
Graphics: Hercules, EGA or VGA  
530 KB main memory, 1 or 2 COM-ports  
MS-DOS (Win9x/NT/2000/XP - DOS-Window)

## To order:

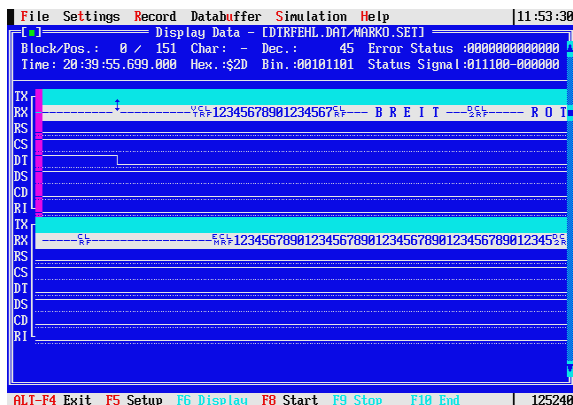
For prices and order numbers, please refer to our current price list.



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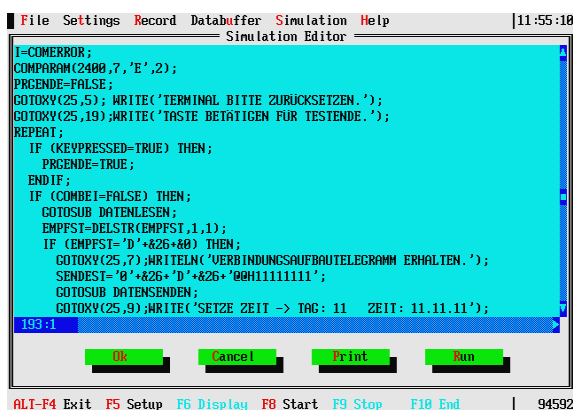
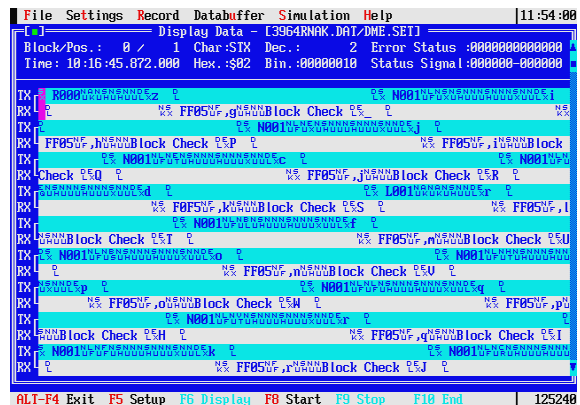


## Handshake-error diagnosis ✓

- ☆ Example ⇒ The tracking of a handshake-protocol error.
- ☆ **sioCHECK<sup>®</sup>** is set up so that the handshake lines RTS, CTS, DTR, DSR, DCD and RI are displayed
- ☆ Although the data transfer is stopped with DTR (see DT, first row: change from HIGH-level to LOW-level), the transfer will be sent on further

## Protocol Analysis ✓

- ☆ Example ⇒ Analysis of data transfer with 3964R-protocol between PLC systems
- ☆ By means of **sioCHECK<sup>®</sup>** it will be determined that a wrong block-check code is repeatedly transferred.
- ☆ The communications partner RX shows this through the control character „NK“ (NAK - Not Acknowledged) as well as the message „Block Check“.
- ☆ Occurring errors (e.g. parity errors) will be marked in color by **sioCHECK<sup>®</sup>**.



## Simulation ✓

- ☆ Example ⇒ The communication behavior of the operating terminal of a stamping machine is to be tested.
- ☆ **sioCHECK<sup>®</sup>** acts as the host computer, which normally activates the operating terminal. **sioCHECK<sup>®</sup>** sends a telegram to initialize the terminal. The terminal acknowledges the successful connection set-up with a confirmation message.
- ☆ In the integrated editor, you set up the simulation program using a programming language similar to PASCAL/BASIC.
- ☆ The simulation can be directly loaded and executed at the start of the program.

