



### **Meinberg Radio Clocks**

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# COM52HS: DCF77 radio clock for 35mm DIN mounting rail.

DCF77 radio clock with serial RS232 interface, pulse per second, pulse per minute and integrated DCDC converter for 19...72VDC operating voltage in plastic housing for DIN mounting rail.

## **Important Note**

This product is no longer available and may have been replaced by a newer product. We will, of course, continue to provide support for units that have already been purchased and are still in use. Please contact our [1]<u>Sales Department</u> for further details.

This product has been discontinued and has been replaced with: [2]

## Key Features

- Internal DCDC converter for 19..72VDC operating voltage
- Pulses per second and per minute
- RS-232 interface
- Reception status indicated by LED
- DCF77 radio clock



# Description

RS232 interface via 9 pin SUB-D female connector.Pulse per second and pulse per minute. These pulses are accessable via the ten pole screw terminal.

### RS232 Output

An asynchronous serial port can be used to transmit information on date and time to other devices. The clock is configured to send time messages automatically with 9600 baud and with a framing of 7E2 once per second.

### **Pulse Output**

After DCF77 synchronization, a pulse per minute and a pulse per second, with a pulse duration of 0.2 seconds, will be switched on. The generation of the pulses will be maintain for 12 hours if the DCF77 receipt is disturbed. Thereafter the pulses will be deactivated.

#### Housing

The receiver module is mounted in a plastic housing for 35mm DIN mounting rails. Two status LEDs (for modulation and free-running mode), the BNC antenna connector and a D-SUB9 connector for the serial RS232 interface are integrated in the front side of the housing.

#### **Operating Voltage**

The system requires an operating voltage of 19...72V/DC witch is applied via two contacts of the integrated screw terminal. The receiver is DC isolated due to an internal DCDC converter, the isolation voltage is 1,5KV DC.

| Characteristics | 5 |
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| Receiver Type             | Narrowband tuned radio frequency receiver with automatic gain control, reception frequency: 77.5 kHz, bandwidth approx. 40 Hz                                   |
|---------------------------|---|
| Status Indicators         | Modulation visualized by LED. Free running state visualized by LED after switching to free running quartz clock mode  |
| Type of Antenna           | Scope of supply includes an active ferrite antenna AI01 and 5m of RG174 coaxial cable with BNC male connectors. Optional: AW02 with RG58, other length of cable |
| Reception Monitoring      | Incoming time string undergoes multiple checks  |
|                           | Plausibility test using two full consecutive time strings   |
| Pulse Outputs             | Pulse per second and pulse per minute (optocoupler), pulse width: 200 msec  |
| Interface                 | Single serial RS-232 interface  |
| Serial Time String Output | Baudrate: 9600 baud   |
|                           | Framing: 7E2  |
|                           | Output string: 32 ASCII characters with date, time and status information   |
| Electrical Connectors     | 9 pin sub D female connector  |
|                           | BNC female connector  |
|                           | 10 pole screw terminal for connecting the pulse outputs and the power supply  |
| Operating Voltage         | 1972VDC   |



| Form Factor            | Dold Enclosure type KO4762, IP40 protected  |
|------------------------|---|
| Current Draw           | approx. 100mA   |
| Physical Dimensions    | 73,2mm x 45mm x120mm (width x height x depth)   |
| Supported Temperature  | Operational: 0 - 50 °C (32 - 122 °F)<br>Storage: -20 - 70 °C (-4 - 158 °F)  |
| Supported Humidity     | Max. 85 % (non-condensing) at 40 °C   |
| Options                | [3]Driver software for Windows, Novell and UNIX (NTP Freeware)  |
| RoHS Status of Product | This product is fully RoHS-compliant.   |
| WEEE Status of Product | This product is handled as a B2B (Business to Business) category product. To ensure<br>that the product is disposed of in a WEEE-compliant fashion, it can be returned to the<br>manufacturer. Any transportation expenses for returning this product (at end-of-life)<br>must be covered by the end user, while Meinberg will bear the costs for the waste<br>disposal itself. |

#### Manual

German manual: [4]Download (PDF)

#### Links:

[1] mailto:sales@meinberg.de

[2] https://www.meinbergglobal.com/english/products/dcf600hs.htm

[3] https://www.meinbergglobal.com/english/products/

 $[4] \ https://www.meinbergglobal.com/download/docs/manuals/german/com52hs.pdf$