



## Meinberg Radio Clocks

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## VME31: DCF77 Radio Clock (VME bus)

DCF77 Radio Clock VME31 with VME bus interface

DCF77 Radio Clock VME31 with VME bus interface

### 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This product is no longer available and may have been replaced by a newer product.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][Sales Department](#) for further details.

### Key Features

- Periodic interrupts
- 2,5mm LED-display
- VME Bus interface
- Reception status indicated by LED
- Buffered hardware clock
- Settable Base Address

## Characteristics

<b>Receiver Type</b>	Narrowband tuned radio frequency receiver with automatic gain control, reception frequency: 77.5 kHz, bandwidth approx. 40 Hz
<b>Status Indicators</b>	Modulation and field strength visualized by LEDs Free running state visualized by LED after switching to free running quartz clock mode
<b>Type of Antenna</b>	DCF77 indoor antenna AI01
<b>Display</b>	8-digit, 7-segment LED display (2.5 mm)
<b>Synchronization Time</b>	2
<b>Accuracy free run</b>	Accuracy of the quartz base operation: $\pm 1 \cdot 10^{-5}$
<b>Reception Monitoring</b>	Incoming time string undergoes multiple checks Plausibility test using two full consecutive time strings
<b>Interface</b>	VME Bus; A16; D8; Slave Access: Short Supervisor I/O (2Dh), Short Non-Privileged I/O (29h) Interrupt Levels: IRQ1...IRQ7, programmable Periodic Interrupts: None, 10msec, 100msec, 1sec, 10sec, 1min, 10min, 1hour, programmable
<b>Serial Time String Output</b>	16 bytes in 1k-block, BCD coded Byte
<b>Interrupts</b>	None, 10msec, 100msec, 1sec, 10sec, 1min, 10min, 1hour, programmable
<b>Dimensions of the front panel</b>	standard: 4HP/20mm, 6U/261,8mm, alternative: 4HP/20mm, 3U/128.4mm
<b>Electrical Connectors</b>	96-pin DIN 41612 connector
<b>Antenna Connector</b>	SMB subminiature coaxial connector
<b>Power Consumption</b>	1,6 W
<b>Backup Battery Type</b>	In case of supply voltage failure the on-board RTC keeps the time based on XTAL for approx. 4 weeks
<b>Cable Type</b>	coaxial cable RG174 for indoor use (SMB-, BNC-connector)
<b>Operating Voltage</b>	+5 V DC
<b>Current Draw</b>	ca. 320 mA
<b>Board type</b>	Eurocard
<b>Board Dimensions</b>	160 mm x 100 mm, 1,5 mm Epoxy
<b>Supported Temperature</b>	Operational: 0 - 50 °C (32 - 122 °F) Storage: -20 - 70 °C (-4 - 158 °F)

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<b>Supported Humidity</b>	Max. 85 % (non-condensing) at 40 °C
<b>Contents of Shipment</b>	Scope of supply includes an active ferrite antenna [2] <a href="#">AI01</a> and 5m of RG174 coaxial cable with BNC connectors. Optional: [3] <a href="#">AW02</a> with RG58 and patch cord, other length of cable

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#### Manual

The English manual is available as a PDF file: [4][Download \(PDF\)](#)

#### Links:

[1] <mailto:sales@meinberg.de>

[2] <https://www.meinbergglobal.com/english/products/dcf77-indoor-antenna.htm>

[3] <https://www.meinbergglobal.com/english/products/dcf77-outdoor-antenna.htm>

[4] <https://www.meinbergglobal.com/download/docs/manuals/english/vme31.pdf>