HSC509: DCF77 Master Clock

DCF77 Radio Clock HSC509

DCF77 radio controlled master clock HSC509 with integrated power supply, slave clock drivers and 2 RS232/current loop Interfaces.

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This product is no longer available and may have been replaced by a newer product.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

- Integrated Power Supply
- LC-display, 4 x 16 characters
- 2 RS232/Current Loop Interfaces
- Reception status indicated by LED
- Buffered hardware clock
- Slave Clock Drivers
- 1024 Switching Times
- 4 Relay Outputs
- Flash-EPROM with bootstrap loader

Characteristics

Receiver Type	Narrowband DCF77 quadrature receiver with automatic gain control, bandwidth: approx. 20Hz
Status Indicators	LEDs for power (integrated power supply), modulation and RF amplitude
Type of Antenna	DCF77 indoor antenna AI01
Display	LC Display, 4 x 16 characters
Accuracy free run	Accuracy of the quartz base after min. 24hrs of synchronized operation: $\pm 1 \cdot 10^{-6}$
Reception Monitoring	Incoming time string undergoes multiple checks Plausibility test using two full consecutive time strings
Pulse Outputs	Slave clock lines (second and minute line) for analog slave clocks, output shorted slave line detection and autotracking of the slave clocks potential separation between power and control parts pulse voltage: 24V pulse current: 0,6A max. pulse width: 1sec (minute line), 0.5sec (second line)
Interface	Two independent serial RS-232-interfaces, menu configurable
Serial Time String Output	COM0: Baudrate: 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600 Baud Framing: 7E1, 7E2, 7N2, 7O2, 8E1, 8N1, 8N2 one active/passive 20mA current loop output one active/passive 20mA current loop input COM1: Baudrate: 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600 Baud Framing: 7E1, 7E2, 7N2, 7O2, 8E1, 8N1, 8N2 one active/passive 20mA current loop output one active/passive 20mA current loop input Output string: 32 ASCII characters with date, time and status information
Relay Outputs	4 relay outputs (changeover contact), max. 50W load
Switch programs	8 different plans assigned to the days of the week (holidays included or not) with up to 1024 switching times can be edited by the 4 keys in the frontpanel. Alternative: Pulses can be programmed to the outputs
Dimensions of the front panel	Milled aluminium, 4 integrated keys for menu routing, 100mm x 160mm
Electrical Connectors	32 pin Phoenix connector (counterpart incl.) BNC coaxial female connector 230V mains cable
Backup Battery Type	In case of supply voltage failure the on-board RTC keeps the time based on XTAL for more than 150 hours (buffer capacitor) Optional: lithium backup battery (life time: 10 years)

Operating Voltage	230V AC, 50Hz
Form Factor	Bopla RegloCard-Plus 1700, IP43 protected
Current Draw	ca. 100mA
Physical Dimensions	160mm x 193mm x 131mm (height x width x depth)
Supported Temperature	Operational: 0 - 50 °C (32 - 122 °F) Storage: -20 - 70 °C (-4 - 158 °F)
Supported Humidity	Max. 85 % (non-condensing) at 40 °C

Manual

The English manual is available as a PDF file: [2]Download (PDF)

Links:

[1] mailto:sales@meinberg.de
[2] https://www.meinbergglobal.com/download/docs/manuals/english/hsc_v2.pdf