ANZ14: LED Display with DCF77 Radio Clock Option (ANZ14/DCF77)

The 14-digit LE-Display shows the time, date and day-of-week. The displays brightness is adjustable via the menu. RS-232 or 20 mA-interface, unlimited series connection possible, with buffered hardware clock and integrated power supply unit.

The Network option [1]ANZ141/NET can act as a slave clock for [2]Meinberg LANTIME NTP Time Server.

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This product is no longer available and may have been replaced by a newer product.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 [3]Sales Department for further details.

This product has been discontinued and has been replaced with: [4]

Key Features

- Stand Alone Radio Clock or Display for external Clock
- Adjustable display brightness
- Good visible LED Display for Time, Date and Day-of-the-Week
- Buffered hardware clock
- optional as Slave Clock for Meinberg LANTIME NTP Time Server (ANZ141/NET)
- Integrated Power Supply (100 - 240VAC)
- Configuration with two push buttons and setup menu.

Description

A serial time sting is generated either once per second, once per minute, on request only or never. Baudrate, framing and time zone can be configured separately by menu and two front panel buttons. It is also possible to use the ANZ14 as a display for a preconnected clock.

Buffered Real Time Clock
In case of supply voltage failure the onboard real time clock keeps the time powered by a backup capacitor for more than 150 hours. This capacitor does not need any maintenance and ensures that the ANZ14 returns with the actual time information even before the first synchronization. Alternatively, the clock can be ordered with a lithium battery which has a live time of at least 10 years guaranteed.

DCF77 Receiver Option:
The ANZ14/DCF77 model variant is a standalone radio clock with integrated DCF77 receiver. An external ferrit antenna is used to receive the signal from the DCF77 transmitter and supplies it to the onboard LF receiver where it is demodulated by a straight detector with automatic gain control.

The ANZ14/DCF77 will be delivered with an indoor antenna AI01 and 5m cable or, by customers specifications, with an outdoor antenna option AW02. Antenna cables can be prefabricated as required. The connection to the external antenna can be done via BNC connector at the rear panel of the display.

Serial Interface
The ANZ14 provides two serial ports which can either be used as RS-232 or RS-422 interfaces. The COM0 interface provides an RS-422 output, COM1 provides an RS-422 input. On this way, a ANZ14 with DCF receiver can synchronize an additional ANZ14 without receiver. The transfer rate and the data format are free selectable. The serial port can sent a time string once per second, once per minute or only on request by sending an ASCII character '?' (ASCII code 3Fh).

Characteristics

Features Interface	!Two Interfaces (RS232 / RS422)
Receiver Type	**ANZ14/DCF77:** Narrowband straight receiver with automatic gain control, Bandwidth: approx. 40Hz
Display	12 numeric LED digits for time and date 2 alphanumeric LED digits for day of the week 14mm/13mm character height (time/date), variable brightness Modulation indicated by LEDs Setup menu for configuration Without RF signal the clock runs on XTAL with an accuracy of $\pm 1 \cdot 10^{-6}$ (after 24 hours of synchronous operation), indicated by LED
Reception Monitoring	Incoming time string undergoes multiple checks Plausibility test using two full consecutive time strings
Interface	Two serial Interfaces - RS232 / RS422, configurable by menu, Baudrate: 9600 baud Framing: 8N1 RS422 Out via COM0; RS422 In via COM1 Output Strings: [5]Meinberg Standard Time String, Atis or SAT-String
Electrical Connectors	9pin SubD female connector BNC female connector (ANZ14/DCF77 only) power cord receptacle
Backup Battery Type	When main power supply fails, hardware clock runs free on quartz basis, life time of lithium battery min. 10 years
Operating Voltage	100 - 240 V AC (50 - 60Hz), 100mA or 9 - 36 V DC, 500mA or 20 - 60 V DC, 250mA (please specify with your order)
Form Factor	Aluminium stack case (optional: black anodised) height x width x depth (72mm x 144mm x 132mm), for cutouts of 140mm x 68mm
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
Contents of Shipment	**DCF77ANZ only:** Scope of supply includes an active ferrite antenna [6]AI01 and 5m of RG174 coaxial cable. Optional: [7]AW02 with RG58 and patch cord (pre-assembled on demand).
Warranty	Three-year warranty
Options	Equipped with a network connector RJ45 in the rear panel and special software the ANZ14 can be used as a Slave Clock for Meinberg LANTIME NTP Time Server [8] (ANZ141/NET).

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 that the product is disposed of in a WEEE-compliant fashion, it can be returned to the manufacturer. Any transportation expenses for returning this product (at end-of-life) must be covered by the end user, while Meinberg will bear the costs for the waste disposal itself.

Manual

The English manual is available as a PDF file: [9]Download (PDF)

Links:

[1] https://www.meinbergglobal.com/english/products/
[2] https://www.meinbergglobal.com/english/products/
[3] mailto:sales@meinberg.de
[4] https://www.meinbergglobal.com/english/products/anz141.htm
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