

DD50 Digital Display

- **Universal Digital Display**
- **Directly connectable to Vaisala's intelligent sensors**
- **High contrast with automatic brightness control**
- **Both on-line and control button configurable**
- **Desktop, panel or wall mounting**



The DD50 is a universal digital display that can be directly connected to Vaisala's intelligent sensors (CT12K, CT25K, FD12, FD12P, PTB220). It can also be used as a panel meter or a general purpose display under control of a host computer. Data values are presented numerically with three bright 5-digit 7-segment LED fields. The type of the data is indicated with a 4-character alphanumeric field placed in front of each 7-segment LED field. The data type field can also be used to show the unit of the data. In the upper part of the display there is a 12-character alphanumeric field that is used to show general information, warnings, alarms or any other application specific information.

This product replaces several Vaisala display products of older generations and introduces some new operation modes. The software of the DD50 is implemented as several independent operation modes. The system configuration can contain several set-ups at the same time, so that one DD50 device can serve as a spare part for different types of systems.

Automatic brightness control of the display is achieved by means of a light sensor that responds to the ambient light conditions. The

front panel filter is mat-finished having excellent optical qualities for light transmission. These features offer good readability in different light conditions.

A rotating switch and a double action push button are used to select between different display pages and to carry out display configuration. Configuration of the display and telecommunication modes can also be carried out via a serial line using a PC terminal program.

The face size of 144 × 144 mm fits standard DIN panels. The slim line body design, however, enables mounting even in 115 × 133 mm panel openings. The stand included in the delivery enables using the display on a table or fastened to a wall or ceiling.

The main data interface of the DD50 display is the RS-485 serial line. An optional modem module provides the means to receive data from remote measurement sites. The DD50 also features a printer port for recording the cloud or visibility data on an Epson compatible matrix printer.

EMC as well as surge protection are standard features of Vaisala displays.

TECHNICAL DATA

GENERAL

Type	General purpose digital display
Features	Automatic brightness control Desk top, panel or wall mounting (stand included)
Material	Aluminium frame, ABS case, grey
Dimensions	144 × 144 mm, depth 65 mm (Body design allows 115×133 mm panel mounting)
Weight	750 g
Supply voltage	10.5 ... 15.5 VDC
Power consumption at max. brightness	12 W

USER INTERFACE

Data fields

- 3 lines of 5-digit 7-segment red LEDs

Data type indication

- 12-character alphanumeric dot matrix field
- 4-character alphanumeric dot matrix fields

Alarm and warning indication

- 5 × 10 mm LED fields

Operation

- Rotary switch 1 pcs
- Double action push button 1 pcs
- Display parameters configurable with a PC terminal program via serial line

INPUT/OUTPUT

Serial I/O

- Opto-isolated RS-485 input (IEC 1162-1/NMEA) applicable to RS-232 or current loop
- 2-wire RS-485 transceiver

Optional I/O

Communication module interface for modem DMX501

Analog inputs

4-channel, current or voltage for analog sensors/transmitters

Relay coil drive

120 mA max. sink

Connections

- 20 screw terminals, 1.5 mm² maximum wire
- Female DB-25 connector for printer

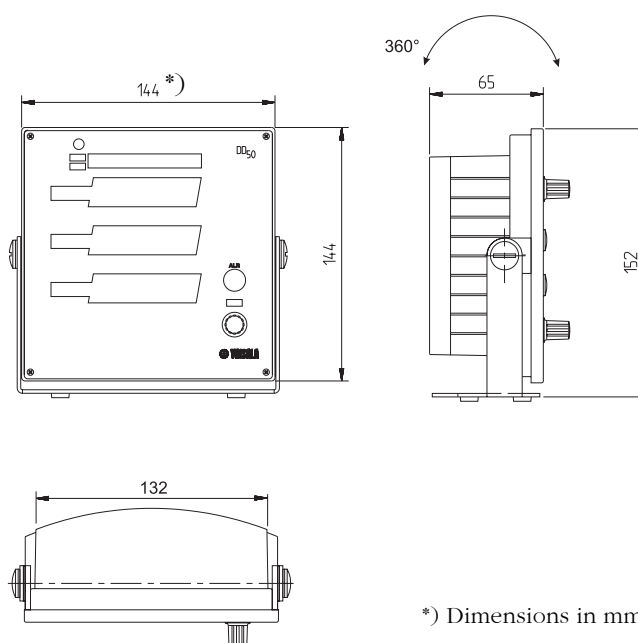
ENVIRONMENTAL

Storage temperature	-40 ... +60 °C
Operating temperature	+5 ... +55 °C
Humidity	Non-condensing
EMC	CE compliant
Vibration	acc. to IEC 68-2-64 MIL-STD-167-1

OPTIONS

Power supply for 115 ... 230 VAC

Modem module DMX501



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