

Control system Ultra Display V3



With the UltraDisplay V3 from Exyte Technology GmbH up to 63 FFUs (Filter Fan Units) can be controlled and monitored.

The 3,5" touch-display offers a comfortable handling and enables a simple but modern visualization of the FFU data.

Ultra Display V3 is a control system for FFUs un cleanroom environments, which offers a closed control circuit. With Ultra Display V3 the speed of up to 63 networked FFUs can be controlled an monitored.

For the communication the with Building Management System, digital inputs and relay outpus are available.

Common Bus systems allow the communication with the FFUs. Following systems are available:

With such inputs and outputs, the setpoint can be switched and the operating and fault status can be monitored. Through a visual warning is possible as well to display error messages.

- LON-RS485
- MWBUS
- Modbus RTU

Also, through an integrated Webserver, the Ultra Display V3 the data can be read out from the BMS.

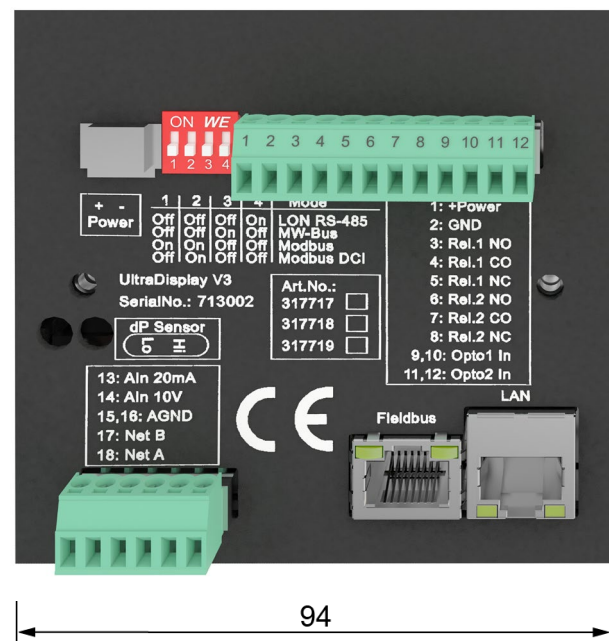
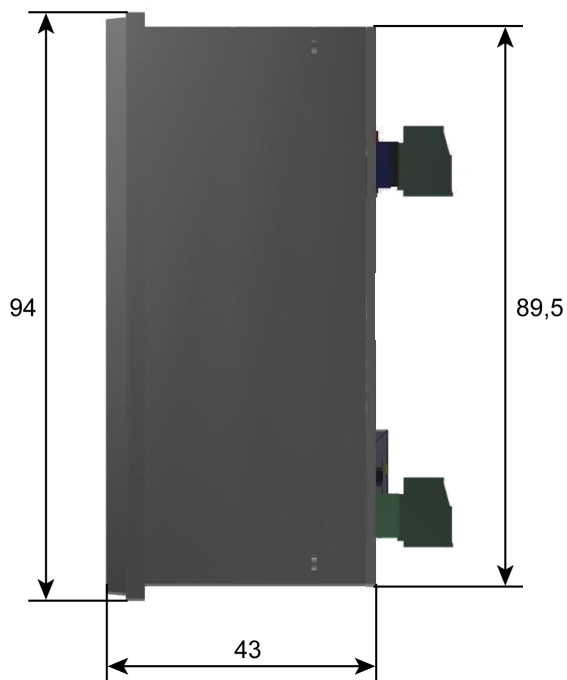
The FFU control can be set via two operating modes. Closed Loop: by means of a setpoint of the air speed (m/s) or differential pressure (Pa) and Open Loop: the setpoint is the rotational speed of the fans (rpm)

The device settings an fan database can be saved or restored with a micro SD card. In the front panel there is a slot for such micro SD card.

For the closed loop control mode, the actual value of the internal differntial preussre sensor or an external sensor (0-10 or 4-20 mA) can be read directly in the device.

Technische Daten

Power Supply	9V – 30 VDC
Power Consumption	2,4 W
Display	3,5" Zoll LCD Touchdisplay
Bus-Interfaces	LON/RS485 ; MWBUS ; Modbus RTU
Internal differential pressure sensor	125 Pa ; 500 Pa
Analoger Input	0-10 V, 4-20 mA
Digitaler output 1 - Changeover contact	24 V / 2 A
Digitaler output 2 - Changeover contact	24 V / 2 A
Digitaler Input 1	9 V – 30 VDC
Digitaler Input 2	9 V – 30 VDC
Dimensions	W/H/D in mm: 94/94/43
Protection class	IP 30
Operating Temperature	0 ... + 50 °C



Steckeransicht

Anschluss	Typ	Beschreibung
Power	2 pol. Exyte	Power Supply 9 V oder 24 VDC 2 PIN +/-
LAN	8 pol. – RJ45	Ethernet
dP Sensor	2 hoses	Intern Differential Pressure Sensor Hi/Lo
Fieldbus	8 pol. RJ45	Bus – LON RS485, Modbus RTU, MWBUS

Pinbelegung

Pin	Bezeichnung	Beschreibung
1	+Power	9-30 VDC
2	GND	0 VDC
3	Rel.1 NO	Digital Output 1 / changeover contact / Relay 1: normally open
4	Rel.1 CO	Digital Output 1 / changeover contact / Relay 1 : root
5	Rel.1 NC	Digital Output 1 / changeover contact / Relay 1 : normally closed
6	Rel.2 NO	Digital Output 1 / changeover contact / Relay 2 : normally open
7	Rel.2 CO	Digital Output 1 / changeover contact / Relay 2: root
8	Rel.2 NC	Digital Output 1 / changeover contact / Relay 2: normally closed
9	Opto1 In	Digital Input 1 +
10	Opto1 In	Digital Input 1 -
11	Opto2 In	Digital Input 2 +
12	Opto2 In	Digital Input 2 -
13	Ain 20 mA	Analog Input 4-20 mA
14	Ain 10 V	Analoger Eingang 0-10 V
15	GND	Analog Ground
16	GND	Analog Ground
17	Net B	RS485 / MWBUS / Modbus RTU
18	Net A	RS485 / MWBUS / Modbus RTU

Serial Number and Typ

Each UltraDisplay has its own serial number.

The different types of the Ultra Display V3 are defined by the integrated differential pressure sensors.

Article Nr.	Messrange of the Sensor
317719	bis 125 Pa
317717	bis 500 Pa