



SensorMonitoring Unit SMU 1200 series

Description

The SensorMonitoring Unit SMU1200 is a display unit for HYDAC fluid sensors and is designed to display and store measured data.

The following combinations of fluid sensors can be connected directly:

- ContaminationSensor CS1000 and AquaSensor AS1000 or HLB1400
- MetallicContamination Sensor MCS1000 and AquaSensor AS1000 or HLB1400

Advantages

- Simple installation in parallel to the customer system (Hydac Sensor Interface HSI for SMU1200, transfer of the sensor's own analogue and switching outputs)
- Simple installation using the magnetic holder or DIN rails
- High protection class IP67. Installation in a switch cabinet is not necessary
- Plug & Work unit including the 5m connection cable required for direct connection of the sensors (sensor connections via M12x1 male connectors, no programming necessary)
- Depiction of the measurement data on large display screen
- Simple keypad operation
- Data is stored in the SMU with a date and time stamp
- Measured values can be read from the standard USB memory stick supplied or via the USB master port
- Simple data processing and data evaluation using MS-Excel or Hydac FluidMonitoring Software FluMoS ('Light Version' available as freeware from www.hydac.com)
- Program restarts independently once voltage is restored; no loss of measured data

Technical details

General data	
Mounting position	No orientation restrictions
Self diagnostics	Continuously with error indication on display
Display	LED, 6/4/4-digit, each with 17 segments
Accuracy of the real-time clock	± 5 s/day / ± 0.5 h/year
Clock buffer	≈ 20 years
Drop height (to IEC/EN 60068-2-31)	Fall height 50 mm
Ambient temperature	0 °C to 55 °C
Storage temperature range	-40 °C to 80 °C
Relative humidity	Maximum 95 %, non-condensing
IP class	IP 67
Weight	≈ 1 kg
Electrical data	
Supply voltage	12 to 24 V DC (± 20 %), residual ripple ≤ 10 % The SMU must not be used with on-board supply systems without load dump protection of maximum 30 V DC
Max. power and current consumption	15 watts; 1250 mA
Protection class	III (safety extra-low voltage)
Interfaces	
USB master port	USB Type A
HSI (HYDAC Sensor Interface)	1-wire half duplex
Ethernet interface	or
	10 Base-T / 100 Base-Tx Protocol: - HSI TCP/IP (port 49322) - Modbus TCP (port 502)
Internal measurement data memory	
Measurement interval 60 s	> 42 days
Measurement interval 60 min	> 2530 days

Model code

SMU 1 2 6 0 - TU - 00 / 000

Type

SMU = SensorMonitoring Unit

Series

1 = 1000 series

Data input

2 = digital

Interface

6 = HSI + USB master

7 = Ethernet + USB master

Options

0 = standard

Supply voltage

TU = 12 to 24 V DC

Sensor combination

A	B
00 = CS1000	AS1000 / HLB 1400
10 = MCS1000	AS1000 / HLB 1400

Customer modification number

000 = customer modification number

Scope of delivery

- 1x SMU 1200 series
- 1x USB memory stick
- 1 x connection cable 5 pole with flying leads for voltage supply, L = 5 m
- 2 x connection cables according to the combination of measurement sensors, L = 5 m
- 1x FluMoS Light CD
- 1 x operating manual
- 1 x DIN rail, L = 20 cm to DIN EN 60715 TH35

Equipment

- Power supply unit PS5, 100–240 V AC / 50–60 Hz / 1.1 A → 24 V DC / 1000 mA, cable length = 1.8 m, part no.: 3399939

Connection cable – Ethernet

- ZBE 45-05, length 5 m M12x1 → RJ45, patch 3346100
- ZBE 45-10, length 10 m M12x1 → RJ45, patch 3346101

DIMENSIONS

