HYDAC INTERNATIONAL

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 (**H**YDAC **S**ensor **I**nterface)	1-wire half duplex
	or
Ethernet interface	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

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
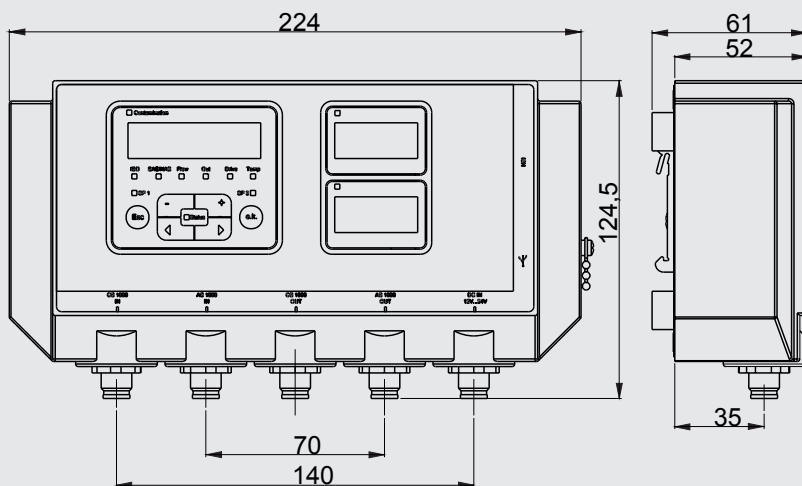 to DIN EN 60715 TH35

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

Note

The information in this brochure relates to the operating conditions and applications described.

For applications or operating conditions not described please contact the relevant technical department.

Subject to technical modifications.