



SD+ 302-22



The newest and highest performance version in the venerable SD range is the SD Plus. New, upgraded hardware and software include a high accuracy digital sensor and integrated data logger. All climate data can be tracked and recorded over time through an Ethernet connection and included software.

The integrated data logger can provide all climate data and door openings from the cabinet through Ethernet and free available software, for further analysis.

The circulation of air in the cabinet is regulated through an integrated fan.

All surfaces are ESD coated in conformity with current ESD 61340-5-1 standard.

The SD+ 302-22 is ideal for the moisture-proof and anti-oxidation storage of wide-ranging technologies and conforms with IPC/JEDEC J-STD 033C & IPC-1601.





Features

- **Online functionality**
- **Accurate sensor RH% and T°C**
- **Lockable doors**
- **ESD safe design**
- **Door & humidity alarm buzzer**
- **Shelves**
- **Dry unit**
- **Power supply**
- **2-series digital display**
- **Castors**
- **Option availability**
- **ESD bonding point**
- **Display multilanguage**
- Interface and datalogging through standard Ethernet interface
- Compatible with new MSL 2.0 software
- +/- 0,8 % RH, +/- 0,1 °C
- 2 doors locked with key.
- Norm (IEC 61340-5-1)
- ESD metal painted body (10⁶ Ohm/sq)
- Dissipative glazing (in- and outside 10⁸ Ohm/sq)
- Longer door openings are detected, high RH levels are detected
- 7 in height adjustable ESD painted steel shelves
- U-2000 dry unit
- Cable 5 meter with IEC plug
- Very convenient settings of RH%, and alarm functions. (3 color)
- 360° rotating wheels
- N₂ Auto Flow, Heating, SMD Reel Racks, etc.
- ESD wristband can be connected to the cabinet
- Display can be set to English, German, Italian & French.

Benefits

- **Maintenance**
- **Dry unit**
- **Highly energy sufficient**
- **Recoverytime after dooropening**
- **Adjustable legs**
- **Temperature**
- **IPC**
- **Energy saving**
- **Remote access**
- **Sensor calibration**
- **More stable Humidity & Temperature**
- The drying unit is maintenance free, easy to service
- Optional second available
- Average power consumption 35 W/h
- <15 min to below 1% with 1 dry unit. (by 1 door opening)
- For leveling out (optional)
- Maximal up to 40 °C (optional)
- According to IPC/JEDEC J- STD 033C & IPC-1601
- Lower power consumption through dynamic regeneration
- Remote access for easy long distance service purposes
- Yearly sensor calibration program for ISO standards
- Dynamic regeneration ensures a more stable climate





Technical Data Cabinet

- External dimensions: (W x H x D) 500 x 1277 x 640 mm
- Internal dimensions: (W x H x D) 490 x 1124 x 602(594) mm
- Weight: 68 kg
- Weight on shelf: 30 kg
- Max. loading capacity: 100 kg
- Body: Steel, conductive coated $10^8 \Omega/\text{sq}$
- Shelves (W x D): 4 pcs long, 468 x 510 mm adjustable.
3 pcs short, 468 x 468 mm adjustable.
- Volume: 320 L
- Voltage: 230 VAC (120 VAC optional)
- Power consumption: 35 W/h
- Protection class: hard grounded, Class 1
- Humidity level cabinet: Drying $\leq 1\% \text{ RH}^*$

* (depending on amount of door openings)

Technical Data Dry Unit U-2000

- Control: Adjustable with control panel 2-series
- Voltage level: 230 VAC/50 Hz. (optional 120 VAC/60 Hz)
- Power consumption: 35 W/h
- Dimensions: W x H x D = 260 mm x 380 mm x 100 mm
- Weight: 8,1 kg.

Technical Data 2-series Display

Settings:

- Language Menu
- Nominal Value Humidity
- Nominal Value Humidity Alarm
- Delay Humidity Alarm
- Doors Alarm
- Interlocking
- Manual Regeneration



Display:

- Supply voltage 24 VAC/DC
- Input 4 function keys (tactile-touch keys)
- Display 61 x 33 mm, multicolor, controllable backlight, adjustable contrast
- Ethernet connection
- Power consumption at 24 VDC, 40 mA





Technical Data Rotronic Sensor HC2-S

Based on the Airchip 3000 Technology use, the HygroClip 2 probes can be used for control of temperature and humidity.

The HygroClip 2 probes can be configured with the ROTRONIC HW4 software and share the following features:

- Measurement of relative humidity.
- Data recording of up to 2000 relative humidity and temperature value pairs.
- Programmable automatic sensor test with fail safe mode and sensor drift compensation.



Technical Data N₂ Auto Flow

- | | |
|-----------------------------------|----------------------------|
| • Power supply: | 230 VAC (110 VAC optional) |
| • N ₂ Connection: | 8 mm hose connection |
| • N ₂ Pressure: | 1 – 6 bar |
| • N ₂ Standby- amount: | 0 – 25 L/min |
| • N ₂ Purge: | 0 – 25 L/min |

Technical Data Heater SH 230-1

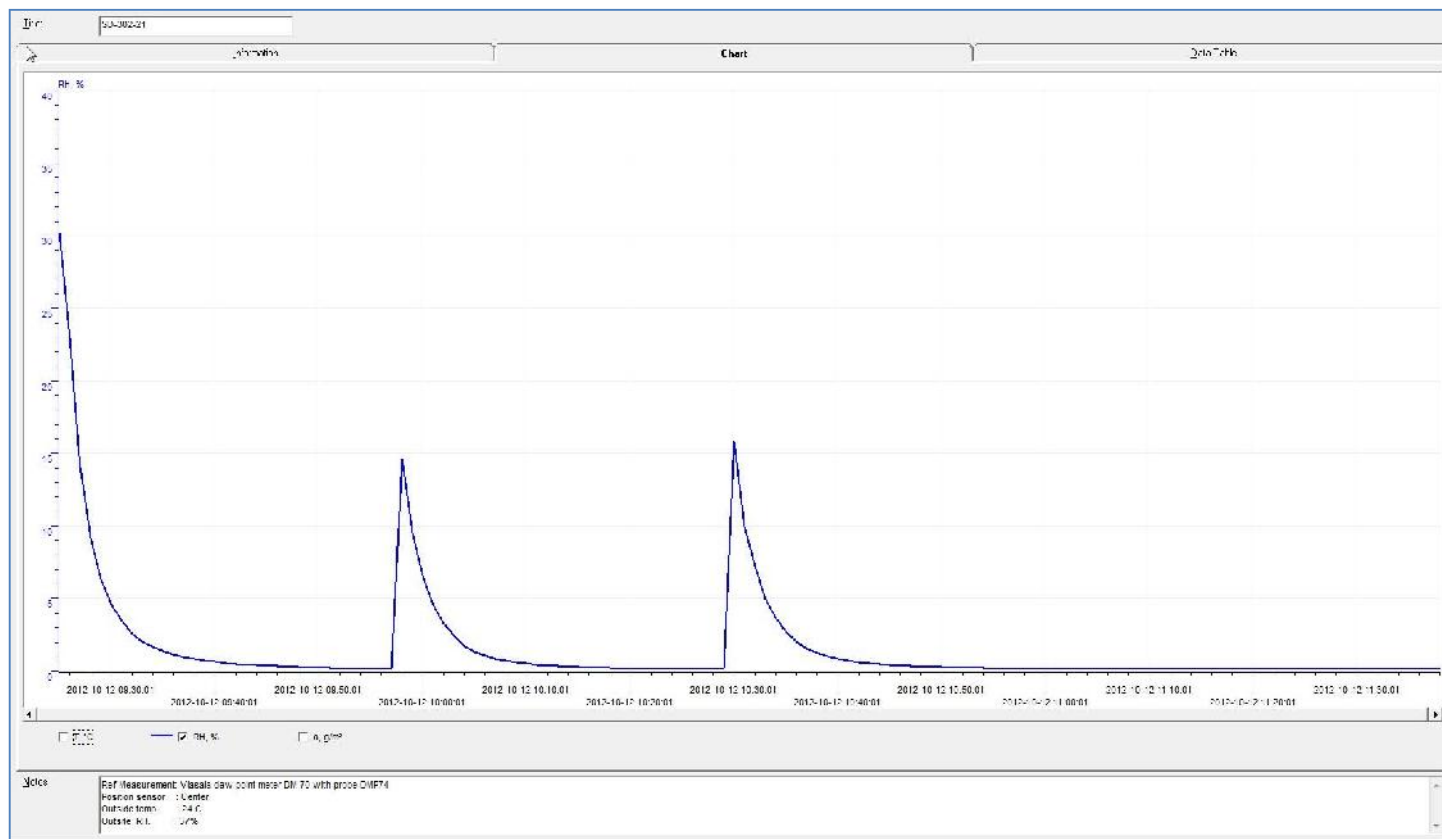
- | | |
|-----------------------|----------------------------|
| • Voltage: | 230 VAC (110 VAC optional) |
| • Frequency AC: | 50/60 Hz |
| • Power: | 530 W |
| • Temperature sensor: | PTC 100 |
| • Thermal protection: | 90 °C |
| • Temperature range: | 30 – 40 °C |
| • Air Flow: | 86 M ³ /H |
| • Display tolerance: | 1 digit at 25 °C |





Performance

Test conditions



Instrument:
Type of dew point sensor:
Accuracy of dew point sensor:
Location of sensor:
Ambient conditions:
Dooropenings:

Vaisala.
Vaisala drycap 180M
 $\pm 0,2^{\circ}\text{C}$ at $+ 20^{\circ}\text{C}$ ($+ 68^{\circ}\text{F}$)
In the direct surrounding of cabinet sensor
Humidity $50 \pm 5\%$ rH, $25^{\circ} \pm 2^{\circ}\text{C}$, Pressure $994 \pm 20\text{ hPa}$.
2 dooropenings, 15 sec. (average RH 0,70%)

