PRODUCT DATASHEET · NITROGEN CABINET · V2.6.9

EJ-N540D/DE
N2 Cabinet

Precision nitrogen-purged, humidity-controlled storage for
moisture-sensitive electronic components, materials and precision instruments



540 L	1–60 %RH	±2 %RH	10^6–10^8 Ω
Storage volume	Humidity range	Sensor accuracy	ESD protection

Swiss SENSIRION sensor · CE / RoHS / C-Tick certified · IPC/JEDEC J-STD-033D compliant

01 Technical Specifications

Model	EJ-N540D	EJ-N540DE
ESD Model	N (White)	Y (Black)
Humidity control range	1%~60%RH adjustable	
Average power	8W	
Sensor accuracy	±2%RH, ±1°C	
Material	Cold rolled steel plate	
Internal dimensions	W596 * D682 * H1298mm	
External dimensions	W598 * D710 * H1465mm	
Shelf quantity	3pcs	
Shelf load	80kg	
FCL load	400kg	
Power supply	110V/220V 50/60HZ	
N.W./G.W.	69kg/84kg	
Package dimensions	70*82*165cm/0.95CBM	

02 Applications

Designed for moisture-proof and oxidation-resistant storage, as well as the secure, long-term storage of humidity-sensitive electronic components and materials. This includes ICs, BGAs, wafers, and other semiconductor devices, alongside optical electronics, printed circuit boards, photovoltaic products, optical films and lenses, and precision instruments and meters. Fully compliant with IPC/JEDEC J-STD-033D.

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03 Product Features

01	**Precise Environmental Monitoring** Swiss SENSIRION industrial sensor for high-precision measurement. Real-time humidity (0~99% RH) and temperature (-9°C~99°C) displayed on bright LED segments for instant visibility.
02	**Heavy-Duty Construction** Built with 1.0–1.2mm premium steel. Reinforced with 3.2mm tempered glass door and magnetic airtight seal. Lockable casters provide both stability and mobility.
03	**Full ESD Protection** Electrostatic-safe design with anti-static coating (surface resistance 10^6–$10^8\Omega$) effectively prevents static buildup, safeguarding sensitive electronic components during storage.
04	**Advanced Nitrogen Purging System** Adjustable flowmeter enables precise nitrogen regulation with rapid humidity reduction. N2 is evenly distributed via micro-hole dispersion, with auto solenoid valve shut-off at set humidity.
05	**Energy-Efficient Performance** Upgraded dehumidifying unit delivers consistent low-humidity conditions while consuming less power—reducing operational costs and environmental impact.
06	**Advanced Safety Features** Flame-retardant dehumidifier housing ensures safe operation and fire resistance.
07	**Smart User Convenience** Built-in smart functions include fault alarm, calibration expiry reminder, display sleep mode, and power-off memory.
08	**Global Certifications** Certified to CE, RoHS, and C-Tick standards. Protected by registered trademarks worldwide and patents in China, Germany, and the UK.

04 Optional Features

4.1 Material Options

- **Standard cabinet and shelves:** Cold-rolled steel
- **Customizable cabinet and shelves:** 304 mirror stainless steel (suitable for cleanroom environments)
- **Standard window:** High-strength tempered glass
- **Customizable:** ESD PC



304 mirror stainless steel option,
suitable for cleanroom environments

4.2 Nitrogen Purging System

- The nitrogen will be shut off when opening the door.
- Nitrogen is evenly distributed through the micro-hole dispersion system for rapid, uniform humidity reduction.



Automatic nitrogen generator with flowmeter and pressure gauges (optional)

4.3 Buzzer Alarm or Three-Color Light Alarm System

Optional audible buzzer or three-color indicator light provides immediate visual and acoustic notification whenever humidity drifts outside the configured range.

4.4 Data Logging System

- **USB local recording** (FAT32 format)
- **Network Interface Logging:** the network interface complies with the TCP/IP protocol and can realize centralized management of multiple cabinets

4.5 Digital Code Lock

Keypad-controlled digital code lock restricts access to authorised operators only, protecting high-value components from unauthorised handling.



Keypad entry with Open / Alarm status indicator

4.6 LED Interior Lighting

- Auto-activated upon door opening.

05 Product Structure



ESD (black) model with digital display and control panel, N2 flow meter, tempered glass observation window, handle lock and dehumidifying unit.

06 Component Details

Digital display and control panel

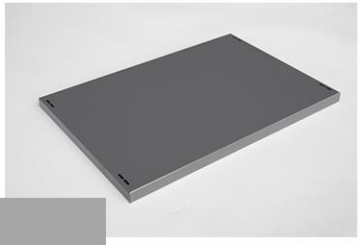


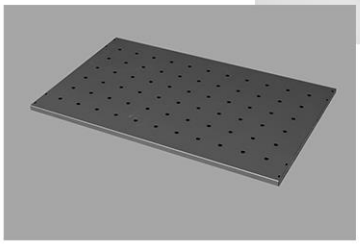


N2 flow meter

Clapboard

(100L, 160L, 255L)





Clapboard with holes

(320L, 435L, 540L, 720L, 875L, 1440L)

Dehumidifying unit





Universal wheels

07 Application Scope & Storage Reference

Relative Humidity	Suitable storage of items
60%~50%	Paintings, antiques, paper money, ancient books, fax paper, copy paper
50%~40%	Cameras, video cameras, lenses, microscopes, endoscopes, binoculars, magnetic tape, disks, records, film, photographic film, musical instruments, stamps, furs, medicinal materials, tea, coffee, cigarette and etc.
40%~20%	Precision hardware molds, measurement instruments, all electronic parts, PC boards, metallic powders, semiconductors, medical supplies and etc.
20% or less	Sample, standard measuring tools, seeds, pollen, seedlings etc.
10%~20%	Electronic Components, IC, BGA and etc.
10% or less	Particularly sensitive to humidity of materials, such as IC, BGA and etc. with higher humidity requirements

08 Products of the Same Category — N2 Cabinet

Model Specifications & Configurations

EJ-N540D: Standard model (white)	**EJ-N540DE:** ESD-protected model (black)

Model	ESD Model	Volume	Internal dimensions (W*D*H) mm	External dimensions (W*D*H) mm
EJ-N100D	EJ-N100DE	100L	446*372*598	448*400*688
EJ-N160D	EJ-N160DE	160L	446*422*848	448*450*1010
EJ-N255D	EJ-N255DE	255L	596*372*1148	598*400*1310
EJ-N320D	EJ-N320DE	320L	898*422*848	900*450*1010
EJ-N435D	EJ-N435DE	435L	898*572*848	900*600*1010
EJ-N540D	EJ-N540DE	540L	596*682*1298	598*710*1465
EJ-N720D	EJ-N720DE	720L	596*682*1723	598*710*1910
EJ-N875D	EJ-N875DE	875L	898*572*1698	900*600*1890
EJ-N1440D-4	EJ-N1440DE-4	1440L	1198*682*1723	1200*710*1910
EJ-N1440D-6	EJ-N1440DE-6	1440L	1198*682*1723	1200*710*1910

09 Related Certificates



















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