

(Note: Dimensions written in red must be modified according to the customer's project requirements.)

WALL-MOUNT TYPE RACK CABINETS

TECHNICAL SPECIFICATION (Applicable to All Manufacturers)

1. SCOPE

- It covers the design, manufacturing, certification, dimensions, mechanical structure, cable entry, locks, surface treatment, installation flexibility, and accessory requirements of 19-inch wall-mount type rack cabinets.

2. DEFINITIONS AND ABBREVIATIONS

- **U:** Refers to the dimension of **1U = 44.45 mm**.
- **DKP Sheet Steel:** Refers to DC01 cold-rolled steel.
- **RoHS:** Refers to Directive 2011/65/EU.
- **UL:** Refers to Underwriters Laboratories compliance.
- **IP:** Refers to Ingress Protection, namely the EN 60529 protection class.
- **PDU:** Refers to the power distribution unit.

3. APPLICABLE STANDARDS

- TS EN IEC 61587-1:2022, IEC 60297, IEC 60068-2-6, IEC 60068-2-27, IEC 61010-1, EN 12150-1, DIN EN 10130, TS EN ISO 9227 / ASTM B117, TS EN ISO 2409 / ASTM D3359, TS EN ISO 2178 / ASTM B499, TS EN 13501-1, DIN 7985 / 965 / 7981 / 934 / 985 / 933, and DIN 1743 / 53571 standards shall be taken as the basis.

4. CERTIFICATION

- The manufacturer shall hold an ISO 9001:2015 certificate.
- A TSE Certificate of Conformity for the product shall be submitted covering EN 61587-1 and IEC 60297 standards.
- The product shall hold a UL certificate.
- Mechanical test reports in accordance with IEC 60068-2-6 and IEC 60068-2-27 shall be submitted.
- RoHS 2 and CE conformity documents shall be available.

5. DIMENSIONS AND CAPACITY

- The cabinets shall comply with IEC 60297 standard.
- Internal capacity shall be available in **7U, 9U, 12U, 16U, and 20U** options.
- External width shall be **600 mm**.
- External depth shall be **450 mm or 600 mm**.



6. LOAD-BEARING STRUCTURE

- The load-bearing structure shall consist of a bent monoblock welded bottom and top chassis manufactured with multi-layer bending technology.
- A minimum static load capacity of **80 kg** shall be provided.
- The structure shall meet x, y, and z axial strength requirements within the scope of EN 61587-1 and shall be certified by IEC 60068-2-6 / -27 tests.

7. DOORS AND PANELS

- **Front Door:** It shall be made of tempered, antistatic, **4–5 mm** smoked glass in compliance with EN 12150-1, or as a full-metal option.
- The front door shall be openable by minimum **135°**, removable, and lockable.
- The glazed front door shall include an aluminium frame and a cast polyurethane gasket.
- **Side Panels:** They shall be openable, removable, and lockable; the front and side panels shall have the same keyed lock.
- **Rear Panel:** It shall be of plug-in type and shall be screw-fixable from the inside for security purposes.

8. LOCKING SYSTEM

- The front door shall have a handle lock with minimum **3-point** locking.
- O-lock or cylindrical lock shall be used on the side panels; all covers shall have the same keyed lock.
- The locking system shall comply with DIN 1743 and DIN 53571 standards.

9. PAINTING AND SURFACE TREATMENT

- The cabinets shall be coated with electrostatic RAL 9005 Black or RAL 7035 Light Grey powder paint.
- Coating thickness shall be within the range of **80–120** microns.
- Corrosion resistance shall be minimum **900** hours and shall comply with TS EN ISO 9227 / ASTM B117 standards.
- The paint used shall be flame-retardant in accordance with TS EN 13501-1 A1 or equivalent standard.

10. VENTILATION

- A fan connection point and a ventilation panel shall be provided on the top chassis.
- AC or DC powered fan options shall be available.

11. 19-INCH MOUNTING RAILS

- The cabinets shall include **2** front-mounted, depth-adjustable 19-inch mounting rails with minimum **1.5 mm** thickness and screen-printed U markings.
- Mounting holes shall be available as square **9.5 × 9.5 mm** or **M6** threaded type.



12. CABLE ENTRY SYSTEM

- A sliding cable entry section shall be provided on the bottom or top chassis.
- This section shall be minimum **350 × 250 mm** in size, gasket-protected, and of sliding construction.

13. INSTALLATION FLEXIBILITY

- The cabinets shall be usable as floor-standing units by adding castors or feet.
- With the optional **D150 mm** Extension Body accessory, rear access shall be provided and the use of deep devices shall be made possible.
- The extension body accessory shall be field-mountable to **D450** or **D600** cabinets.

14. GROUNDING

- Grounding shall comply with IEC 61010-1 standard and shall provide a maximum resistance value of **0.1 ohm**.

15. MATERIAL STANDARDS

- DKP sheet steel shall comply with DIN EN 10130 DC01 standard and RoHS requirements.
- Powder paint shall meet ISO 9001, ISO 2178, ISO 2813, ISO 6272, ISO 8130 series, and RoHS requirements.
- Glass shall be tempered in accordance with EN 12150-1.
- Fasteners shall comply with DIN 7985, DIN 965, DIN 7981, DIN 934, DIN 985, and DIN 933 standards and RoHS requirements.
- Locks shall comply with DIN 1743 and DIN 53571 standards and RoHS requirements.

16. ACCESSORIES

- The fan unit shall be of **2-fan** or **4-fan** ball-bearing type.
- The fan unit shall be thermostat-controlled and capable of operating within the range of **0–45 °C**.
- Each fan shall have a maximum noise level of **47 dBA** and a minimum airflow rate of **2.3 m3/min**.
- The fan unit shall comply with CE 2006/42/EC, 2014/35/EU, and 2014/30/EU directives.
- The fan unit shall also comply with EN ISO 12100, EN 55032, EN IEC 62368-1, EN 60204-1, and EN IEC 61000-6-1 / -3 standards.
- An accredited test report shall be submitted; CE declaration alone shall not be accepted.
- The PDU shall have an aluminium body.
- The PDU shall be **1×16 A** fused, **1U** type, and with a minimum of **6** outlets.
- The PDU shall be CE certified.

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