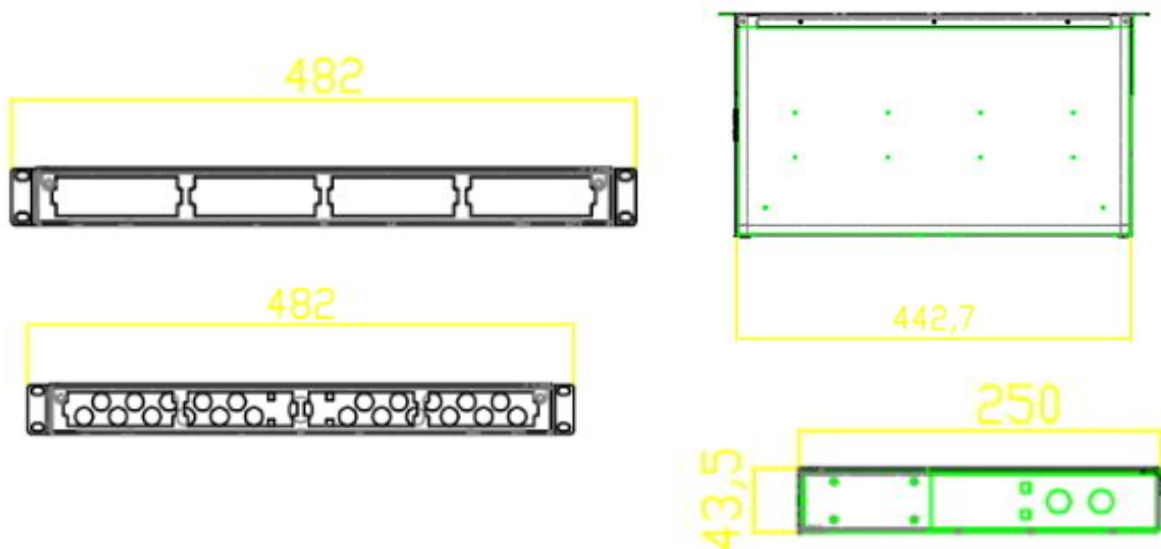


Specification for 1U rack type 96 core porous high density distribution frame

Basic Information:

1. Product name: 1U rack type 96 core porous high-density optical fiber distribution frame



2. Product use: Used in data center, telecom room, enterprise network and other places of optical fiber connection and management, realize the centralized wiring of optical fiber lines, transfer, scheduling and other functions.

2. Physical Specifications:

1. Size:

1. Height: 1U, about 44.45mm.
2. Width: 19 inches, or 482.6 mm, meets standard rack installation requirements.
3. Depth: 250mm

2. Weight: generally 3.5kg

3. Type of optical fiber interface:

1. Common support MPO, LC and other interface types. If MPO interface is used, it can usually be configured to install multiple MPO pre-termination boxes to achieve 96 core connection. For example, four 24-core MPO pre-termination boxes can be installed. If the LC interface is used, since each LC duplex coupler occupies two fiber ports (one transmit and one receive), a maximum of 48 LC duplex couplers can be supported, that is, 96 fiber ports.

4. Performance parameters:

1. Nominal working wavelength: According to different application scenarios and fiber types, it supports 850nm (multi-mode), 1310nm (single-mode), 1550nm (single-mode) and other common fiber communication wavelengths.
2. Insertion loss: for MPO interface, insertion loss is generally $\leq 0.7\text{dB}$; For the LC interface, the insertion loss is usually $\leq 0.5\text{dB}$. Products from different manufacturers may vary slightly.
3. Return loss: the return loss of LC interface is generally $\text{PC} \geq 40\text{dB}$, $\text{UPC} \geq 50\text{dB}$, $\text{APC} \geq 60\text{dB}$; The return loss of MPO interface varies according to the specific structure and connection mode, but generally it should also meet the high return loss requirements to ensure the quality of signal transmission.
4. Electrical strength: $\geq 3\text{KV}$ (DC) /1min no breakdown, no flying arc, to ensure safe use in normal

electrical environment.

5 Insulation resistance: $\geq 1000\text{M}\Omega/500\text{V}$ (DC), to ensure good insulation performance, prevent signal interference and leakage and other problems.

6. Fiber bending radius: the bending radius of the internal fiber should be $\geq 30\text{mm}$ (static) and $\geq 20\text{mm}$ (dynamic) to ensure that the bending degree of the fiber in the distribution frame will not affect the signal transmission.

5. Structure design:

1. Frame structure: the use of high-strength metal materials, cold rolled steel plate to ensure that the distribution frame has sufficient strength and stability, can withstand long time use and a certain degree of external force impact. The surface is treated with anti-rust and anti-corrosion, such as spraying and galvanizing.

2. Tray or module box: it is equipped with multiple trays or module boxes for installing components such as fiber adapter and MPO pre-termination box. The tray or module box should have good fixing and positioning functions to ensure the stability of the fiber connection.

3. Wire handling device: it is equipped with reasonable wire handling device, such as wire handling ring, wire handling slot, etc., which is convenient for sorting and fixing the fiber jumpers, so that the jumpers are arranged neatly and orderly, which is easy to manage and maintain.

4. Labeling system: with a clear label position or label slot, it is convenient to mark and identify each fiber port, so that the fiber connection can be quickly found and located.

6. Installation and compatibility:

1. Installation: support standard 19-inch rack installation, fixed on the rack by means of screws or clasp, simple and firm installation.

2. Compatibility: compatible with the mainstream fiber jumpers, connectors, optical modules and other equipment on the market, can be used with different manufacturers, different types of network equipment for good cooperation