osi1501 Series

Constant-current input, low-voltage DC output, high reliability



Product introduction

The osi1501 series is a constant-current power converter designed for long-distance power transmission. It converts constant-current power into low-voltage DC suitable for the load. Advanced technologies and comprehensive protection provide high efficiency, high performance, high reliability, high redundancy and long service life. It has been used in applications requiring high reliability, including deep-sea observation-network power supplies.

Product features

- 10 A constant-current input
- 48 VDC output voltage
- 10 kW output power
- Overcurrent, undercurrent, overvoltage and output short-circuit protection
- Customization available to user requirements

Specifications

Parameter	Specification
Operating input current	10 A.
Input polarity	Positive voltage relative to earth.
Output voltage	48 VDC.
Output polarity	Floating output optional.
Output power	10 kW; flexible configuration to user requirements.
Ripple	Better than 100 ppm peak-to-peak under output conditions.
Stability	Less than 0.1% per 8 hours after a 2-hour warm-up.
Temperature coefficient	Voltage and current: better than 50 ppm/°C.
Ambient temperature	Operating: +2°C to +14°C. Storage: −40°C to +85°C.
Protection	Overvoltage and undervoltage; overcurrent; undercurrent protection.
Input HV lead	1 m long, maximum insulation voltage 30 kV.
Output lead	Maximum output current 10 A; maximum withstand voltage 30 kV.

Typical applications

Deep-sea observation-network power supplies; constant-current DC transmission; other high-to-low-voltage equipment; scientific research, etc.

Outline dimensions

Maximum outside diameter 320 mm; length 484 mm.