

Model: UT-M4-40C

(Product Name: DC power surge protector)

# **User manual**



### **UTEK TECHNOLOGY (SHENZHEN) CO., LTD.**

Add: Room 1001, Building 7, Skyworth Innovation Valley, No. 8, Tangtou No.1 Road, Shiyan Old Street, Bao 'an District, Shenzhen

Tel: +86-755-81202008 Fax: +86-755-27886083 Http: <u>www.uotek.com</u>



#### 1. Overview

AC power surge protectors are mainly used for C-level protection of power distribution systems. They are used to protect electrical and electronic equipment from lightning electromagnetic pulse induced voltages, operating transients and resonance ( $<100~\mu$  s) overvoltage. They are widely used in communication equipment, electrical appliances, power equipment, security monitoring, transportation, industrial control, aviation and other fields of power protection. This series of products has the characteristics of extremely fast response time, built-in thermal protection, low residual voltage, timely tripping, etc., and the flame retardant level reaches V-0 level, which can prevent fires to the greatest extent and play a role of safety protection.

#### 2. safety guide

- Only professional and technical personnel are allowed to install, maintain and replace lightning protection products according to this manual.
- Installation must be carried out in the case of power failure.
- Please check the working status of the lightning arrester regularly, and replace it in time if the lightning arrester fails.
- Surge protector and circuit breaker should keep a distance of 3-18cm.

#### 3. Specifications

Model	UT-M4-40C
Continuous operating voltage	380VAC
Maximum continuous operating voltage	385VAC
Nominal discharge current (In)	20KA
Maximum flow capacity (Imax)	40kA
Protection level (Up is In)	≤1500V
Access wire area	6 mm
Remote Signal Definition (Optional)	NC-COM: turn off, COM: common point, NO-COM: turn on
failure indication	Green: Normal, Red: Failed
Response time (tA)	25ns
Dimensions	90*36*65mm
protection level	IP20
preposed fuse	40AgL/gG
protection mode	+/PE, -/PE
Flame retardant level	V0/red
installation method	35mm DIN rail installation
Operating environment	Temperature -40 $\sim$ +85 $^{\circ}$ C, relative humidity $\leqslant$ 95%(25 $^{\circ}$ C), height $\leqslant$ 3km



#### 4. Installation environment

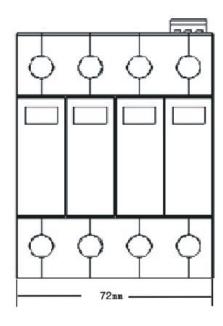
- Please make sure it is indoors or in a waterproof box.
- Avoid direct sunlight.
- Avoid installing in places with severe vibration, it should be installed on DIN35mm rail.
- Make sure that the working voltage of the surge protector complies with the mains working voltage.
- Ensure that the lightning arrester can be reliably grounded, and the power frequency grounding resistance is lower than 10 ohms.

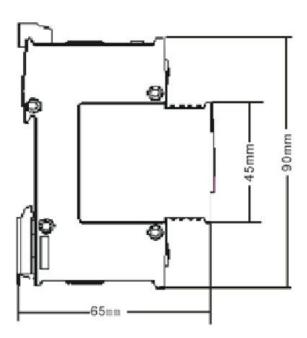
## 5. Installation preparation

Tools: Phillips screwdriver, flat-head screwdriver, wire stripper, etc.

Auxiliary material	Specification	QTY	Function
Preposed fuse	30Agl/gG	1	Installed before the lightning arrester
L, N connecting wire	≥6mm2	Each 1	The length depends on the site conditions
PE connecting wire	≥10mm2	1	Nearby grounding
Remote signal line	≥0.05mm2(30AWG)	2	Be used to monitor the working status of the lightning
			protection module
Rail fixing	35mm rail installation	2	Fixed SPD
Mounting rail	DIN35mm	1	The length depends on the actual situation
Screw	M4	2	Fixed rails

#### 6. Dimension







## 7. Malfunctions

Malfunctions	Reasons	Solutions	
	The lightning protector is damaged by	Contact the lightning protection manufacturer	
The display window of the SPD is	lightning strike or other external force.	or agent to replace the lightning protection	
red.		device.	
After the remote signal is	The remote signal wiring is wrong or the	Please refer to the instruction manual to adopt	
connected, the alarm or the line is	lightning protector is damaged.	the correct remote signal wiring method or	
disconnected.		confirm whether the lightning protector is	
		damage.	
Circuit breaker trips frequently.	The parameters of the circuit breaker	Replace circuit breaker/replace lightning	
	do not match/the leakage current of the	protector.	
	surge protector is too large.		