# FL45-1000

## 1000M Ethernet Surge Protector

### Features

1. IEC61000-4-5 and ITU-TK20&K21
2. The high response surge arresters
3. Clamping voltage and low loss against high speed signal
4. Designed by theory of current limited and voltage clamped, discharged to ground
5. Standard:10Base-T/100Base-TX/1000Base-TX

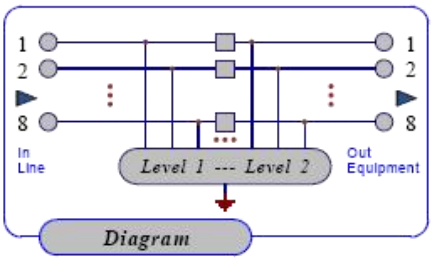


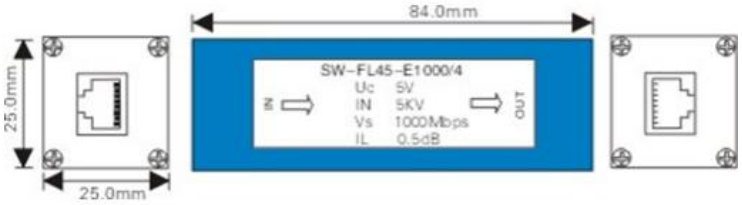

## Introduction

IEC61000-4-5 and ITU-TK20&K21 are the recognized standards for top quality surge protectors, FL45-1000 made by the high response surge arresters, the advantage allow clamping voltage and low loss against high speed signal, because it had a low capacitance. Designed to protect data communication lines in local and wide area networks up to 1000Base-TX transmission speeds.

## Circuit diagram

FL45-1000 is designed by the theory of current limited and voltage clamped, discharged to ground. When the data line exist surge, the FL45-1000 is induced and worked ,the lightning energy is discharged to ground, and the high surge voltage is clamped to low level, so our devices is protected.




**Dimension**

## Specification

Standard: 10Base-T/100Base-TX/1000Base-TX standard
10/100/1000M signal: IEC6100-4-5 and ITU-TK20&21
Nominal discharge current(In):5 KA(8/20μS)
Working voltage: 0-5V
Limit voltage: ≤40V
Apply Band rate: 1000Mbps
Connector: RJ45 (F)
The line of protection: 4 lines (1, 2, 3, 6)
Insert consumption: ≤0.5dB
Delay time: ≤1ns
Working temperature:-20 to 60°C
Storage temperature:-25 to 85°C
Humidity: Relative humidity 5% to 95%
No power supply needed, No consumption
L×W×H: 72mm×42mm×25mm
Shell: Alnico
Color: Blue
Weight: 10g
**Warranty: 3 years**
**Approvals: FCC, CE, RoHS approvals**

## Packing List

1. Ethernet Surge Protector FL45-1000 × 1
2. User manual × 1

**Applications**

Usually the FL45 is used in protecting the following devices:

| | |
|---|---|
| 1 .Ether net Exchanger | 2 .Ether net HUB |
| 3 .Router | 4 .Computer |
| 5 .Indus trial control devices | 6 .Net server for Video system |