

# Model: UT-S2201

**RS-232 lightning protector**

## Datasheet



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## 1. Overview

This lightning surge protector refers to the national standard IEC61643-21:2000 / GB/T18802.21 design. With the development of the national economy, the development of the Internet era is increasingly new, the rapid progress in the development of Internet technology. However, it cannot ignore the existence of this or that problem in the development, safety issues are put in the first place. Daily life, lightning damage to electronic equipment is the most serious, static electricity generated by the threat is also everywhere, in order to the majority of users have a safer use of the environment, to improve the reliability of equipment requirements are increasingly strong.

Uses: Used for industrial control Internet, RS-232 interface, dedicated lines, automatic control and instrumentation lines, data lines and telephone equipment, fax machines and other equipment protection, but also for the protection of sensors in the current loop, secondary instruments; so that the protected equipment from damage caused by induction overvoltage, operating overvoltage and electrostatic discharge.

## 2. Major Functions & Features

- Support RS-232 lightning protector

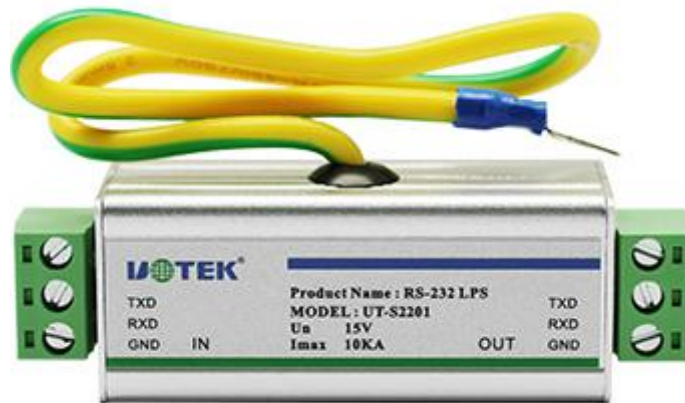
## 3. Technical Parameters

- Rated operating voltage  $U_n$ : 15V
- Max. DC operating voltage  $U_c$ : 16.5V
- Max. AC operating voltage  $U_c$ : 11V
- Rated operating current  $I_L$ : 0.12A
- Nominal discharge current (8/20 us)  $I_n$ : 5KA
- Max. discharge current  $I_n$ : 10KA
- Limiting voltage  $U_{pl}$ :  $\leq 30V$
- Series impedance characteristics of the line  $R_o$  : 10 Ohm
- Capacitance value between line and line  $C_{ll}$ :  $\leq 80pF$
- Capacitance value between line and ground  $C_{pe}$ :  $\leq 140pF$
- Response time  $t_a$ :  $< 1 ns$
- Operating temperature range:  $-40 \sim 85^\circ C$
- Test standard: IEC61000-4-5
- Test level: X
- Insulation resistance:  $> 1M \Omega$
- Insertion loss (dB):  $\leq 0.5 dB$
- Enclosure protection level: IP30
- Dimension: 25 x 25 x 82mm
- Enclosure material: shielded metal aluminum
- Wiring form: terminal block (RS-232)
- Anti-static Level: 4
- Transmission rate (BPS): 10M

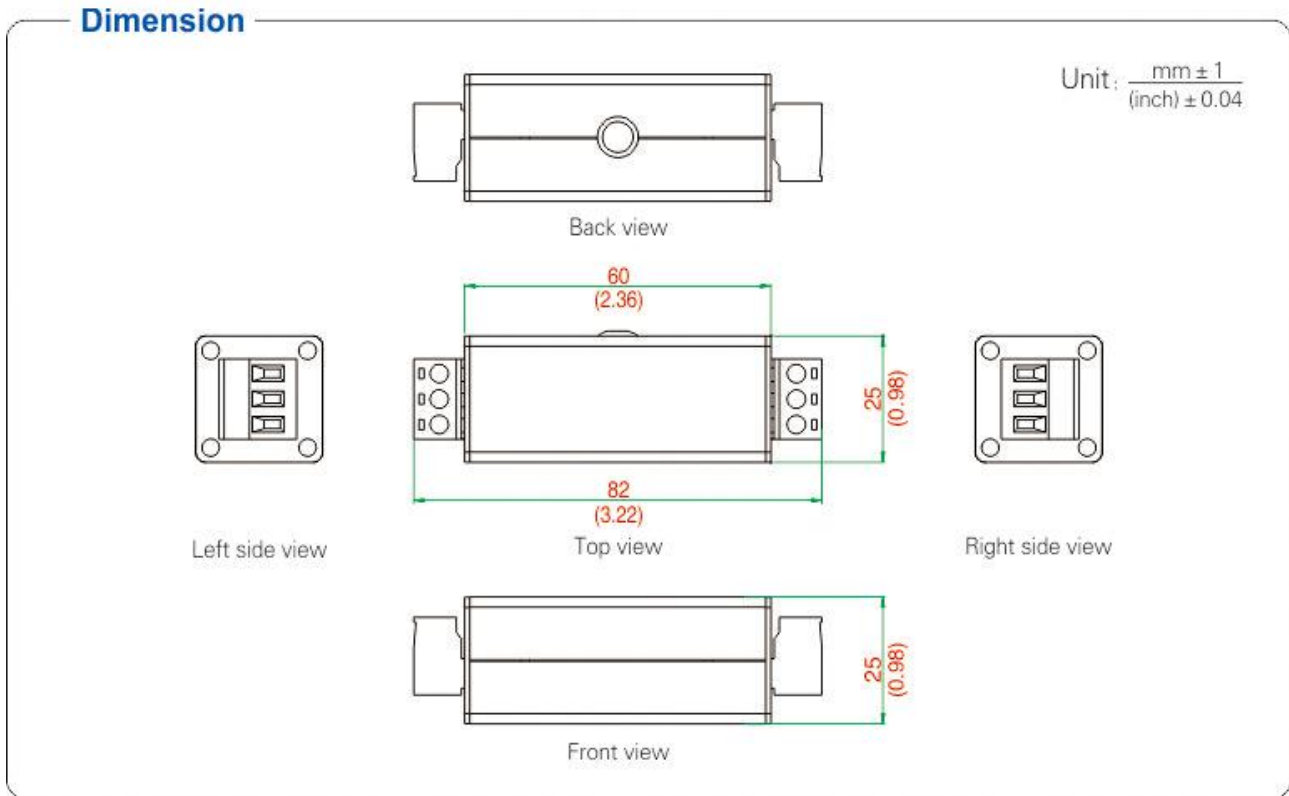
## 4. Technical Specification

Model	UT-S1101	UT-S2201
Rated operating voltage Un	15V	15V
Max. DC operating voltage Uc	16.5V	16.5V
Max. AC operating voltage Uc	11V	11V
Rated operating current IL	0.12V	0.12V
Nominal discharge current (8/20 us) In	3KA	5KA
Max. discharge current In	5KA	10KA
Limit voltage Upl	≤30V	≤30V
Series impedance characteristics of the line Ro	10 Ohm	10 Ohm
Line to line capacitance value Cll	≤80pF	≤80pF
Capacitance value between line and ground Cpe	≤140pF	≤140pF
Response time ta	<1 ns	<1 ns
Operating temperature	-40~85°C	-40~85°C
Test standard	IEC61000-4-5	IEC61000-4-5
Test Level	X	X
Insulation resistance	>1MΩ	>1MΩ
Insertion loss (dB)	≤0.5 dB	≤0.5 dB
Enclosure protection level	IP30	IP30
Dimension	25*25*82	25*25*82
Housing material	Shielded metal aluminum	Shielded metal aluminum
Wiring type	Terminal block (RS-232)	Terminal block (RS-232)
Anti-static level	4	4
Transmission Rate (BPS)	10M	10M

## 5. Product View (Appearance)



## 6. Structure Dimension



## 7. Ordering Information

Model	Signal/ Interface		Interface protection level	Baud rate	Environment			Power		
	IN	OUT			Temperature		Humidity	Port-Power	External power	
					-25~70°C	-40~85°C	5~95%			
UT-S2201	RS-232 Terminal block	RS-232 Terminal block	5KV-10KV			-25~70°C	-40~85°C	5~95%	Port-Power	External power