

## Glass Reader (*AST-R12/AST-R12F*)

AST-R12 series is a contactless smart card reader. The reader adopts the widely recognized ISO14443 smart card technology. It provides high reliability, fast response time and low power consumption for a wide range access control system.

The reader provides glass frame cover to increase the durability and is easy for cleaning. It has built in bi-color LED and Buzzer to provide visible and audio alert for users.



## Features

- I Built in dual color light pipe
- I Built in Buzzer
- I Support ISO14443 Type A,B, ISO18092 Smart Card
- I Up to 7cm Reading Range



## Specifications

AST-R12			AST-R12F	
Card Interface				
Operate Frequency	ISO 14443 Type A , 13.56MHz		ISO 14443 Type A,B,ISO18092 , 13.56MHz	
Card Type	Mifare Series, Mifare Plus		Mifare, Mifare Plus, Desfire, Felica and etc	
Read Range	Up to 7cm		Up to 7cm	
Response Time	0.1s		0.2s	
Interface				
Communication	Wiegand 34 Bits	RS485 Interface (19200,8,n,1)	Wiegand 34/64 Bits	RS485 Interface (19200,8,n,1)
LED Control	Yes		Yes	
Buzzer Control	Yes		Yes	
General				
Power	12V / 150mA			
Working Environment	-10℃ to 50℃ 10% to 90% RH			
Color	Glass Surface with Black or White Color			
Dimensions	86mm x 86mm x 11mm (Flush Mount) / 86mm x 86mm x 22mm (Surface Mount)			

## Wiring Connection

Wire Color	Description
Red	12V DC
Black	GND
Green	Data 0
White	Data 1
Orange	LED
Yellow	Buzzer

**FCC Caution:**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.