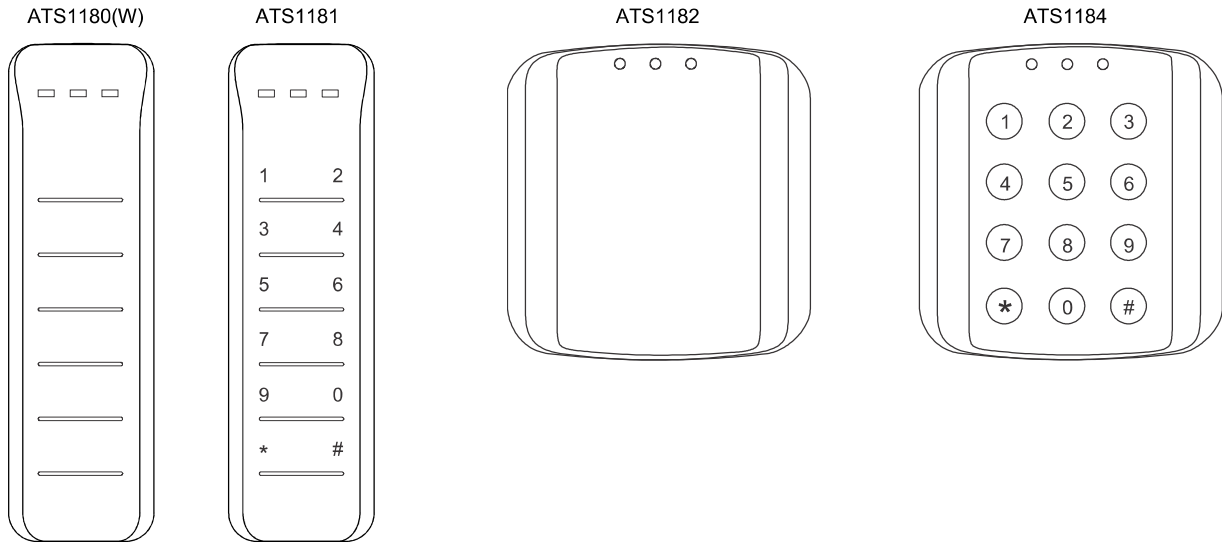


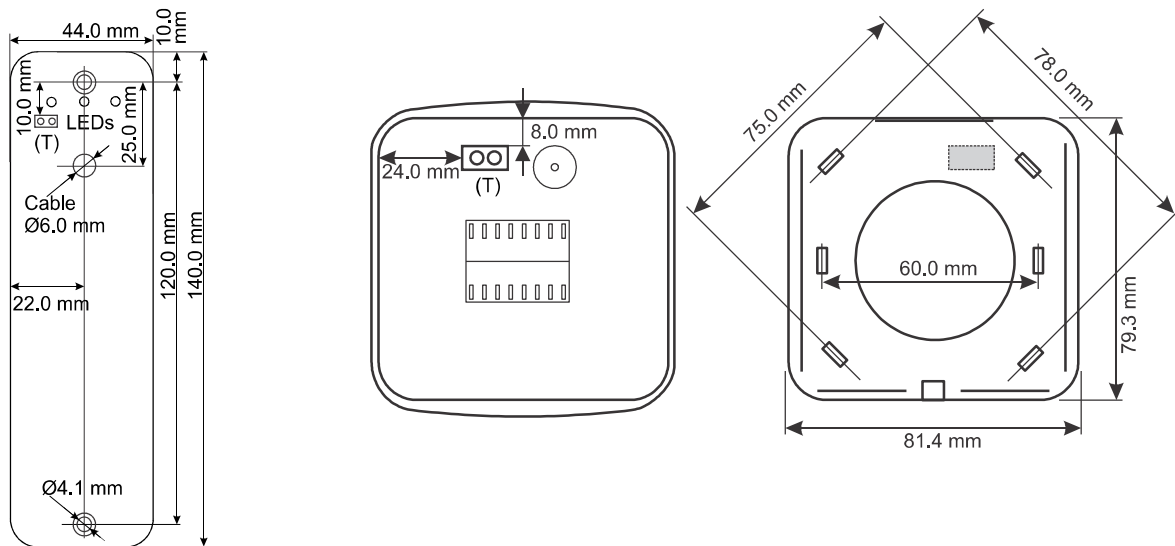
ATS118x Series Mifare Bus Reader Installation Sheet

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EN: Installation Sheet

Description

The ATS118x Series readers are Mifare card readers (compatible with ACT4xxE cards). They are designed, for

example, to mount on metal, window or door frames and are suitable for any location that requires a small reader.

ATS1181 and ATS1184 are equipped with a keypad for card+PIN applications.

ATS118x incorporate all interface electronics necessary to interface with the ATS control panel bus and the ATS125x local bus. The reader includes an input for a request to exit button and an open collector output to control a door relay.

It is configurable through a menu system accessible via a bus LCD RAS or the ATS1482 Programming card.

The reader operates from 10 to 30 VDC.

ATS118x series readers are waterproof.

Mounting

The reader can be mounted on any flat surface by two pan head screws, 3.0 to 3.5 mm diameter, located under the cover. A slightly reduced range will be experienced when mounted on metal surfaces.

It is not recommended to use countersunk screws.

If readers are placed closer than 10 cm from each other or if the reader is installed on metal, the reader distance can be shorter.

Do not install close to sources of powerful electromagnetic disturbance.

Do not cut the cable shorter than 10 cm.

RAS addressing

The address of the reader for bus operations is set to the default address RAS 16. You can change it using a configuration card or accessing its online menu system when connected to the RS-485 bus.

Note: It is possible to change the reader address with configuration card only when the reader is not polled.

Tamper

The reader is provided with a tamper facility (Figure 2, item T). When connected to the bus, tamper data is transmitted to the control panel with system data.

Reader programming

When using the reader with an Advisor Advanced control panel, use the control panel programming menus. See *Advisor Advanced Installation and Programming Manual* for details on reader programming.

When using the reader with Advisor Master control panels, use the reader built-in menus. Enter via the Installer menu and select the menu "Remote Devices", then select "RAS".

The following options are available:

1. Tamper Option: Enable/disable (default enabled).
2. Reader Address: Changing reader address (1 to 16), default = 16.
3. RTE (egress): Enable/disable the request to exit and open collector (default disabled).
4. Backlight Option: Permanent/Access only (default Access only).
5. Buzzer Option: enable/disable reader buzzer (default enabled).
6. Card Bit Limit: The maximum length of the secure card number in bits (the allowed range is 26 to 56 bits, default is 48).
7. Restore Factory Settings.

8. Set Known Config Key: Reset the configuration key to the predefined one 0102030405060708090A0B0C0D0E0F10.

Caution: After the configuration is complete, change the configuration key to prevent an unauthorized configuration change.

9. Secure Mode: Enable/disable (default enabled).

Reader wiring

Table 1: Reader wiring

Red	+12V	Positive 10 to 30 VDC supply, 80 mA
Black	0 Volts	DC supply ground
White	D+	RS-485 Data +
Green	D-	RS-485 Data -
Yellow	RTE	Request to exit button
Violet	OC	Open Collector output used to control a door relay
Bare wire	Shield	Safety shield

Spare wires are not used.

Use WCAT54 cable to extend the standard shielded cable. Make sure the shield is properly connected.

Cable length depends on the bus configuration.

Reader LEDs

Table 2: Reader LEDs

LED pos.	Colour	Description
Left	Green	System disarmed
	Red	ATS125x: System armed
	Green / red flashing	Valid card presented
	Green flashing	Door open time
Middle	Orange	ATS4000: System not ready ATS125x: Always on
Right	Red flashing	Alarm

Specifications

Number of card combinations	72x10 ¹⁵
Supply voltage	10 to 30 VDC
Supported card types	Secure mode: ATS145x series, Mifare Desfire EV1 Unsecure mode: ACT4xxE, Mifare Classic UID, Mifare Desfire EV1 UID, Mifare Plus UID, Mifare UltraLight UID
Connectivity	ATS data bus
Cable	LIYY 2 m
Normal operating current	50 mA at 13.8 VDC
Maximum operating current	80 mA at 13.8 VDC
Open collector output (OUT terminal)	14 VDC max, at 50 mA max.
LED	Tri-color
Wireless operating frequency	13.553 to 13.567 MHz
Maximum power output	42 dBμA/m at 10 m
Field strength	According to EN 300 330
Material of design housing	Plastic