



IR 9000

The IR 9000 readers are passive long-distance RFID readers operating according to the European UHF (ultra high frequency) regulations. The readers enable usage of passive long-distance RFID technology in applications like automated vehicle identification (AVI), logistic systems and access control applications.

These sophisticated readers are able to identify tags based on Atmel's passive TAGIDU chip (ATA5590) from a distance of 4 to 8 meters (12-24 feet)*. Writing operations are possible up to 4 meters (12 feet). The readers have an integrated antenna and the option to connect up to 4 external antennas. The fourth external antenna can be connected in case the internal antenna is deactivated.

The IR 9000 readers are available with several interfaces for easy integration and offer a variety of security options. They support anti-collision with up to 100 tags in the field. Via the three I/O ports peripherals can be addressed. Due to the extremely compact size the readers can also be easily installed in environments with limited space. The wide operation temperature range of the readers and their protection class enable usage in indoor and outdoor environments.

* depending on the antenna configuration and tags



Specifications

Operating frequency	865-868 MHz
Output power	2 W
Voltage	12-30 V (nominal 24 V)
Current consumption	max 1 A (nominal 500 mA)
Interface	
IR 9000 2	RS-232, Wiegand
IR 9000 5	RS-485
IR 9000 E	Ethernet, Wiegand, available on request
IR 9000 U	USB, Wiegand, available on request
Dimensions of the reader	224x190x53,17 mm (hwxwd)
Material of the housing	Sheet metal
Material of the cover	Plastic
Protection class	IP44
ESD	4-6 kV
Antenna	Four antenna connectors, connecting combinations: One internal antenna, One internal antenna and 1-3 external antennas, 1-4 external antennas
Leds	1 led indicating operations (tricolour), 4 leds for testing purposes
Frequency allocation	ETSI 302 208
EMC	ETSI EN 301 489-1, ETSI EN 301 489-03, v. 1.4.1
Storage temperature range	-50 °C to + 150 °C
Operation temperature range	-30 °C to + 60 °C