IDESCO

Scalable identification solutions

Idesco EPC Anticollision

Passive long-distance reader

This innovative passive long range UHF reader makes it possible to create cost-effective and user-friendly identification applications for vehicle identication (AVI), logistic systems and access control. The Idesco EPC Anticollision reader is a passive long-distance RFID reader operating according to the European UHF (ultra high frequency) regulations and it is fully compliant with Class1 Gen2 (ISO 18000-6C) protocol.

The reader uses RS232 connection by default, but can be optionally equipped with an IP67 classified Ethernet connection. By default, the EPC Anticollision possesses a single internal antenna. Optionally, the EPC Anticollision may also deploy an external plug-n-play antenna via its SMA connector. For starters, this capability enables expansion of the EPC Anticollision read range. However, since RS232/Ethernet messages sent to the system also identify the antenna capturing a tag's data, the EPC Anticollision also boasts an ability to determine the direction of a moving tag. The Idesco EPC Anticollision reader requires commands from the host system to be able to change its configuration or communicate with tags. Commanding reader from the host system makes it possible to perform miscellaneous read and write operations with tags in the reading area. For example, the reader can select only a certain tag or a tag population and read/write any of its/their memory banks. It is also possible to use a password to communicate with password protected tags and even lock or kill selected tags.

It is possible to change the antenna configuration and transmitting power of the reader from the host system by commands. This makes it possible to fluently modify the effective reading/writing area of the reader. The Idesco EPC Anticollision has a tricolor LED, buzzer and a FET output that can be controlled by commands as well.

Naturally, the Idesco EPC Anticollision reader supports anticollision enabling simultaneous multiple tag detection. This is possible because the unit stores reading events to a tag buffer, and those reading events can be requested serially to the system for further processing by commands. This tag buffer boasts a capacity of up to 200 tags: 100 each for two active antennas or 200 for a single antenna.

Additionally, the reader's wide operational temperature range and robust protection class allow you to confidently deploy it in either indoor or outdoor settings.

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Specifications

Operating Frequency	865-868 MHz
Voltage	12..30VDC (nominal 24VDC)
Current Consumption	0,5 A @ 24 V
RFID Technology	EPC C1G2, ISO 18000-6C
Housing Dimensions	305 x 305 x 70 mm (hxwxd)
Housing Material	Aluminium/plastic
Installation Method	Adaptable mounting kit
Colour	White
Protection Class	IP67
Antenna	Internal circularly polarised and SMA connector for the external antenna
Interfaces	RS-232 (default) Ethernet (optional, available on request)
I/O's	FET Output
LEDs	Tricolour
Cable	5 m pigtail
Buzzer	Yes
Storage Range	-40 °C to +85 °C
Operational Range	-35 °C to +80 °C
Frequency Allocation	ETSI 302 208
EMC	ETSI EN 301 489-1, ETSI EN 301 489-1, ETSI EN 301 489-03, v. 1.4.1
Read Range	Idesco EPC Metal Tag ABS ≤ 10 m Idesco EPC Metal Tag HD ≤ 15 m (w/o metal ≤ 5 m) Idesco EPC Windshield Label ≤ 4,5 m Idesco EPC Mifare Card ≤ 4 m Idesco EPC Card ≤ 4 m Idesco EPC Sail Tag ≤ 3 m

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