Idesco EPC IA
Passive long-distance RFID 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 IA reader is a passive long-distance RFID reader operating according to the European UHF (ultra high frequency) regulations.

By default, the EPC IA posseses a single internal antenna. Optionally, the EPC IA may also deploy an external plug-n-play antenna via its SMA connector. For starters, this capability enables expansion of the EPC IA read range. However, since RS232 messages sent to the system also identify the antenna capturing a tag's data, the EPC IA also boasts an ability to determine the direction of a moving tag.

Naturally, the Idesco EPC IA reader supports anticollision enabling simultaneous multiple tag detection. This is possible because the unit stores reading events to a tag buffer before forwarding them serially to the system for processing. This tag buffer boasts a capacity of up to 200 tags: 100 each for two active antennas or 200 for a single antenna.

Idesco's EPC IA reader is conveniently configurable to either RS232 or Wiegand connections. Additionally, the reader's wide operational temperature range and robust protection class allow you to confidently deploy it in either indoor or outdoor settings. Innovatively, EPC IA can also be readily integrated in a system deploying Idesco's Access 7C Mifare reader. This is possible since the RS232 output format of both readers is identical and they both can query the same type of tag (Idesco EPC Mifare Card), reporting to the system the same MIFARE UID. Idesco's EPC IA reader has one FET output that grounds for 5 seconds after every successful reading event.

The Ideso EPC IA reader is remarkably easy to deploy. Conveniently, the reader initiates tag polling/reading automatically upon power-up without requiring any initiating commands.

Specifications

Operating Frequency	865-868 MHz
Voltage	12..30 VDC (nominal 24 VDC)
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 external antenna
Interfaces	RS-232
	Wiegand
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 301 489-03, 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