

Long-range reader

WBL-multi



[Intelligence] [Convenience] [Assistance]

[ICA]
PARKING

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The ICA long-range reader is an RFID (radio frequency identification) reader especially developed for vehicle detection, and it provides a high-performance and cost-effective supplement. The UHF (ultra-high frequency) transponder, the counterpart of the long-range reader, is located on a hybrid chip card.

As digital information can be read from and stored on the chip card up to a distance of 5 metres, the long-range reader is a convenient solution, because it is sufficient to hold the hybrid chip card against the windscreen from inside the car or to place it on the dashboard. This comfort is supplemented by the robust design and the extremely low operating costs.

Technical data

Frequency range	865 MHz – 868 MHz (UHF)
Output power (max.)	+30 dBm
Radiated power (max.)	+33 ERP
Protocols	EPC Class 1 GEN2 / ISO 18000-6C
Nominal impedance (antenna connections)	50 Ohm
RX Input sensitivity	typ. -80 dBm
Antenna interface	3-port-TX / RX interface with TNC reverse plug
Communication interface	Ethernet TCP / IP
Digital interfaces (GPIO)	4 digital inputs 4 digital outputs
Current load digital outputs	each 500 mA; max. 1500 mA
Operating system	Linux @ ARMv7 based Proc.
Far-field beam angle	65°
Polarisation	circular
Antenna gain	8,5 dBiC
Axial ratio	typ. 1 dB
Power supply	typ. 700 mA (without GPIO); max 2.5 A (incl. GPIO)
Temperature range	-20 °C bis +55 °C
Storage temperature range	-40 °C bis +85 °C
Dimensions (W x H x D)	approx. 300 mm x 300 mm x 71 mm
Weight	4.26 kg
Class of protection	IP 67
Housing material	Aluminium Druckguss, Stahl und Kunststoff
Equipment	The system complies with EPC Gen2 V2 / ISO 18000-63 standards integrated 70° wide-range antenna combined TX/RX antenna interfaces (1 internal, 3 external) dense reader mode (DRM) output power adjustable from 20 dBm to 33 dBm (100 mW – 2 W)