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DATA SHEET

ALDIS-R20012AC

Automated Load Detect Ident System
Localization systems

SICK Sensor Intelligence



LOCALIZATION SYSTEMS

ALDIS-R20012AC

ORDERING INFORMATION

Type	part no.
ALDIS-R20012AC	1142593

Further device versions and accessories at www.sick.com/Automated_Load_Detect_Ident_System

DETAILED TECHNICAL DATA

FEATURES

Product category	Gateway and cloud solutions
Application	Indoor and outdoor applications
Identification technology	RFID
Sensor	Acceleration sensor, Magnetometer, Thermometers
Scanning range	≤ 2 m
Optical indicators	3 (LED) status displays
Internal computer	1 GB, DD3, dual-core Cortex-A7 with Cortex-M4 co-processor
Internal memory	16 GB
Operating system	Linux and Micro Services
Ecosystem	Docker
User interface	TDC-E Device Manager, User Manager, Interface Manager, Portainer, TEMS Web interface
Data protocol	MQTT, REST API
Data format	JSON
Connectivity	Mobile communication (4G) WLAN LAN
Mobile network	Global coverage, LTE TDD: 1900/2300/2500/2600, LTE-FDD: 700/800/850/900/1700/1800/1900/2100/2600, UMTS: 850/900/1700/1900/2100
Region of use	North America, Latin American
Housing material	Polyamide PA6
Housing color	Light blue (RAL 5012)
Housing dimensions (W x D x H)	162 mm x 32 mm x 128 mm
Items supplied	TDC-E210GC with ALDIS software module, RFID read/write device with integrated RFU620 antenna

MECHANICS/ELECTRONICS

Supply voltage	24 V DC (9 V DC ... 36 V DC)
Power consumption	2.4 W
Enclosure rating	IP20 (according to DIN EN 60529)

INTERFACES

Ethernet		✓ (2)
	Data transmission rate	10 Mbit/s ... 1,000 Mbit/s
	Electrical connection	RJ45
Wireless LAN		✓
	Data transmission rate	≤ 65 Mbit/s, single band 2.4 GHz
	Protocol	IEEE 802.11 b/g/n
USB		✓
Serial		✓
	Electrical connection	Micro-Fit (20-pin)
CAN bus		✓ (2)
	Data transmission rate	1 Mbit/s, adjustable
	Protocol	J1939, CANOpen
	Electrical connection	Micro-Fit (20-pin)
Inputs/outputs		
	I/O	6 analog inputs (configurable, current and voltage), 6 digital inputs/outputs (configurable), 2 additional digital inputs, 2 additional digital outputs [1]
Optical indicators		3, LED, status displays
Connections		
	Molex	1x 14 pin connector (PWR, DIOs and Analog-Inputs)
	Molex	1x 20 pin connector (additional DIOs, 1-wire, RS-232, RS-422/485/SSI, CAN A, CAN B)
	Ethernet	1x ETH0
	Ethernet	1x ETH1
	USB 2.0	1x type A
	SMA	2x antenna connector
	MCX	1x antenna connector
	USB	1 x Micro-B (on board)
Configuration interface		Web-Interface, REST API

[1] Analog measurement of voltage (0 - 36 V) with an accuracy of ±(0.2%+30 mV), current (0 - 32 mA), with an accuracy of ±(1%+0.1 mA), input resistance 27.5 kΩ typical for voltage mode, 100 Ω typical for current mode.

AMBIENT DATA

Ambient operating temperature	–20 °C ... +60 °C
Ambient temperature, storage	–30 °C ... +70 °C
Electromagnetic compatibility (EMC)	EN 303446-1 EN 55032 EN 55024 EN 61000-3-2 EN 61000-3-3
Product safety	EN 62311:2008
Radio approval	RED

Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/1142593

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SICK AT A GLANCE

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SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

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