



# ALDIS-R20012AC

Automated Load Detect Ident System

GATEWAY SYSTEMS

**SICK**  
Sensor Intelligence.



## Ordering information

Type	Part no.
ALDIS-R20012AC	1142593

**Included in delivery:** TDC-E210AC (1), RFU620-10101 (2)

Other models and accessories → [www.sick.com/Automated\\_Load\\_Detect\\_Ident\\_System](http://www.sick.com/Automated_Load_Detect_Ident_System)



## Detailed technical data

### Features

<b>Product category</b>	Gateway and cloud solutions
<b>Fields of application</b>	In- and outdoors
<b>Identification technology</b>	RFID

### Mechanics/electronics

<b>Supply voltage</b>	24 V DC (9 V DC ... 36 V DC)
<b>Power consumption</b>	2.4 W
<b>Housing dimensions (W x D x H)</b>	162 mm x 32 mm x 128 mm
<b>Housing material</b>	Polyamide PA6
<b>Housing color</b>	Light blue (RAL 5012)
<b>Enclosure rating</b>	IP20 (according to DIN EN 60529)
<b>Connections</b>	<ul style="list-style-type: none"> <li>Molex 1x 14 pin connector (PWR, DIOs and Analog-Inputs)</li> <li>Molex 1x 20 pin connector (additional DIOs, 1-wire, RS-232, RS-422/485/SSI, CAN A, CAN B)</li> <li>Ethernet 1x ETH0</li> <li>Ethernet 1x ETH1</li> <li>USB 2.0 1x type A</li> <li>SMA 2x antenna connector</li> <li>MCX 1x antenna connector</li> <li>USB 1 x Micro-B (on board)</li> </ul>

### Performance

<b>Sensor</b>	Acceleration sensor, Magnetometer, Thermometers
<b>Internal computer</b>	1 GB, DD3, dual-core Cortex-A7 with Cortex-M4 co-processor
<b>Internal memory</b>	16 GB
<b>Operating system</b>	Linux and Micro Services
<b>Ecosystem</b>	Docker
<b>User interface</b>	TDC-E Device Manager, User Manager, Interface Manager, Portainer, TEMS Web interface
<b>Data protocol</b>	MQTT REST API
<b>Data format</b>	JSON
<b>Connectivity</b>	Mobile communication (4G)

	WLAN LAN
<b>Mobile network</b>	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
<b>Region of use</b>	North America, Latin American
<b>Max. read range</b>	≤ 2 m

## Interfaces

<b>GPS</b>	✓
Protocol	GPS, GLONASS, BeiDo, Galileo
Electrical connection	MCX
<b>Modem</b>	✓, 4G
Data transmission rate	(≤ 150 Mbit/s), Full 4G performance cannot be guaranteed on operating temperature over 60 °C.
<b>Ethernet</b>	✓ (2)
Data transmission rate	(10 Mbit/s ... 1,000 Mbit/s)
Electrical connection	RJ45
<b>WLAN</b>	✓
Data transmission rate	(≤ 65 Mbit/s), single band 2.4 GHz
Protocol	IEEE 802.11 b/g/n
<b>Serial</b>	✓, RS-232
Electrical connection	Micro-Fit (20-pin)
<b>CAN bus</b>	✓ (2)
Data transmission rate	1 Mbit/s, adjustable
Protocol	J1939, CANOpen
Electrical connection	Micro-Fit (20-pin)
<b>Inputs/outputs</b>	I/O 6 analog inputs (configurable, current and voltage), 6 digital inputs/outputs (configurable), 2 additional digital inputs, 2 additional digital outputs <sup>1)</sup>
<b>Optical indicators</b>	3, LED, status displays
<b>Configuration interface</b>	Web-Interface REST API

<sup>1)</sup> 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

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

## General notes

<b>Items supplied</b>	TDC-E210GC with ALDIS software module, RFID read/write device with integrated RFU620 antenna
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Classifications

<b>ECLASS 6.0</b>	19179090
<b>ECLASS 6.2</b>	19179090
<b>ECLASS 7.0</b>	19179090
<b>ECLASS 8.0</b>	19179090
<b>ECLASS 8.1</b>	19179090
<b>ECLASS 9.0</b>	19179090
<b>ECLASS 10.0</b>	19179090
<b>ECLASS 11.0</b>	19179090
<b>ECLASS 12.0</b>	19179090
<b>UNSPSC 16.0901</b>	43222605

## SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

## WORLDWIDE PRESENCE:

Contacts and other locations –[www.sick.com](http://www.sick.com)