

## ■ ASR550 – The state of the art Mid-Range Reader with optional multiplexing

Due to the state of the art technology the new stationary ISO reader ASR550 is much less sensitive against electrical interference and metal in the environment. In combination with the patented Autotuning function they offer a simple installation and more easy integration in all types of applications.

In addition to the standard RS232 and RS485 interfaces optional Ethernet and Bluetooth modules are offering the whole range of modern communication. **An outstanding feature is the multiplexing of up to 8 Antennas with the optional multiplexing units AAS050/100/200.**



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## Advantages of ASR550

- The Reader is compatible to the ISO Standard 11784/5 and the new ISO14223 HDX transponders. It reads FDX-B and HDX with a very good reading range.
- The new antenna design offers less influence of metal and electro-magnetic interference on the reading range.
- The reader provides several Autotuning (ATF) possibilities: at power on, continuously in the background, via command or by "Tune" key on the ASG566 housing.
- Another outstanding feature is the patent pending Integrated Diagnosis Function IDF, which allows on-site diagnosis for evaluating the noise situation without additional hardware like oscilloscopes or spectrum analysers.
- The ASR550 is especially designed for continuous operation in feeding stations, scales or sorting gates – even under worse conditions.
- The reader has an RS232 and an RS485 interface as standard. With the optional Bluetooth or Ethernet modules the ASR550 offers a high level of connectivity.
- Wireless Synchronization ensures the best HDX reading performance in multi-reader applications. The optional Wired-Sync. module allows wired ISO Synchronization for the best possible performance.
- The wide operating voltage range from 12 to 24 Volt provides more flexibility regarding the power supply.
- With the optional Multiplexing Units AAS050, AAS100 and AAS200 the ASR550 can be used for up to 8 multiplexed antennas.
- The ASR550 can connect to Agrident's Android App in order to stream and store live data on a smartphone.

## Technical Data of ASR550

<b>Frequency</b>	134,2 kHz
<b>Transponder types</b>	HDX compatible (ISO 11784/5) FDX-B compatible (ISO 11784/5)
<b>Reading range</b>	with antenna APA206 (50 x 60 cm):  up to 90 cm with HDX transponder of ø 30 mm  up to 80 cm with FDX-B transponder of ø 30 mm
<b>Interfaces</b>	RS232 (9600 - 115200 Baud) RS485 (9600 - 115200 Baud)  Optional: • Bluetooth Class 1 (Master or Slave Mode) • Ethernet
<b>Synchronization</b>	Wireless (for HDX only)  Wired Sync. for HDX and RF-Carrier for FDX optional
<b>Multiplexing</b>	With the optional units: AAS050 (2 channels) AAS100 (4 channels) AAS200 (8 channels)
<b>Power supply</b>	12 to 24 V DC, 2 A max
<b>Protection</b>	IP 66 (with ASG566 housing only)
<b>Temperature range</b>	-10 to +60°C
<b>Dimensions</b>	ASR550 - L x W x H: 160 x 100 x 30 mm ASG566 - L x W x H: 192 x 185 x 90 mm
<b>Approvals</b>	CE, FCC, IC

## Accessories for ASR550

- |                              |  |                                 |                        |
|------------------------------|--|---------------------------------|------------------------|
| ■ ASG566 IP 66 housing       | ■ ASB200 connecting box<br>and AAC cable | ■ Add-on modules:               |                        |
| ■ AAS050/100/200 Multiplexer |  | ASY100 ISO Sync module          | AET200 Ethernet module |
| ■ APA203/206/160 Antenna     | ■ APS550 Power supply                    | ABT100 Class 1 Bluetooth module |                        |

## Accessories for ASR550 Stationary Reader

APA203



APA206



APA206 Double sided arrangement with ASB200 and antenna cables



ASB200



ACC202



### APA203/206 Antennas and ASB200 Connection box

The APA203 and APA206 antennas are designed for applications that need mid-size distance identification, e.g. in feeding stations or weighing systems.

With the compact design, the robust construction and its resistance to typical environmental influences the antennas are perfectly suited for applications in agriculture and industrial automation. The different sizes allow an optimal choice concerning the reading volume and needed space. The exchangeable AAC antenna cable is available in different length.

With the ASB200 connection box the APA203/206 antennas can be used in double sided arrangements with one reader only, e.g. at gates or in scales.

#### Technical Data APA203/206 and ASB200 Connection box

##### APA203

Dimensions L x W x H:	320 x 300 x 25 mm
Weight approx.:	1.5 kg incl. cable
Protection level:	IP 65

##### APA206

Dimensions L x W x H:	600 x 500 x 25 mm
Weight approx.:	3.0 kg incl. cable
Protection level:	IP 65

##### ASB200

Dimensions L x W x H:	115 x 115 x 80 mm
Weight approx.:	300 g incl. cable
Protection level:	IP 66

##### Antenna cables

AAC202	length 2 meter
AAC203	length 3 meter
Other sizes on demand	

## Accessories for ASR550 Stationary Reader



### ASG566 Housing

The ASG566 housing transforms the ASR550 reader boards into robust IP66 device. The housing fits perfectly and protects the boards from mechanical and environmental damage. The ASG566 is equipped with the colour coded Plug-n-Read plugs for easy and robust connection.

#### Technical data ASG566 Housing

Protection level:	IP 66 acc. EN 60 529
Temperature range:	-10°C to 60°C
Dimensions L x W x H:	195 x 165 x 90 mm
Weight approx.:	500 g

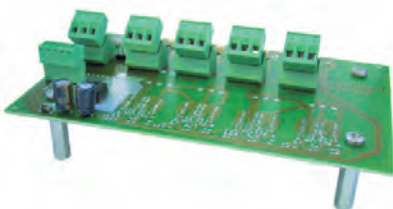


### AZE156 Power supply

The AZE156 power supply is a robust device in an IP66 housing that work with main voltage from 110 to 230 Volt and ensure the best reading performance for ASR550 readers. It comes with a colour coded plug for the ASG566 housing

#### Technical data AZE156 Power supply

Power supply:	110 to 230 Volt
Protection level:	IP 66 acc. EN 60 529
Temperature range:	-10°C to 60°C
Dimensions L x W x H:	195 x 165 x 90 mm
Weight approx.:	1100 g



### AAS100/200 Multiplexer

AAS100/200 are antenna multiplexers which allows the use of up to four (eight) antennas with the ASR550 reader (same type as single antennas for ASR550). The antennas are activated one after the other. The selection (sequence) of the antennas is done configurable. Channels can be enabled and disabled via software. The speed of the MUX sequence can be selected as well.

#### Technical data AAS100/200 Multiplexer

Power supply	12 to 24 Volt 30 mA max. (from ASR550)
RF TX Frequency	134,2 KHz
Max. numbers of Antennas	4 (AAS100) or 8 (AAS200)
Temperature range	0°C to 60°C
Dimensions L x W x H:	160 x 100 x 30 mm
Weight approx.	100 g



## Accessories for ASR550 Stationary Reader

ABT100



### Add-on Modules for ASR550

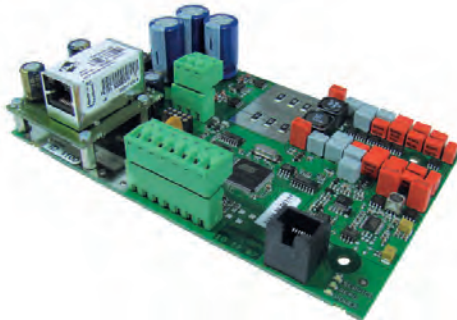
#### ABT100 Bluetooth Module

With the ABT100 Bluetooth module every stationary ASR550 Reader can be Bluetooth enabled. The Class 1 module has a range of 100 m at free field conditions and makes wireless data transfer very convenient. The module is powered by the reader.

#### ABT100 Bluetooth Module

Bluetooth	Class A
Interface to Reader	RS232
Power supply	12 to 24 Volt provided by ASR550

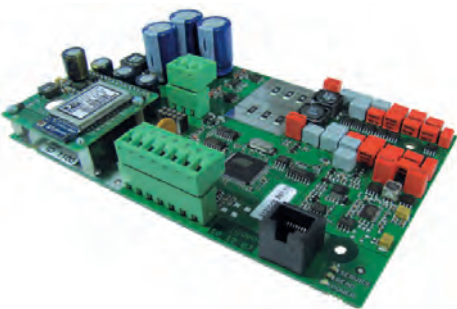
AET100



#### AET100 Ethernet Module

Standard	IEEE 802.3
Physical Layer	10/100 Base-T
Network data rate	10/100 Mbps (auto-sensing)
Mode	Full- or half-duplex (auto-sensing)
Protocol	TCP
Power consumption	1.2 W max. (provided by ASR550)

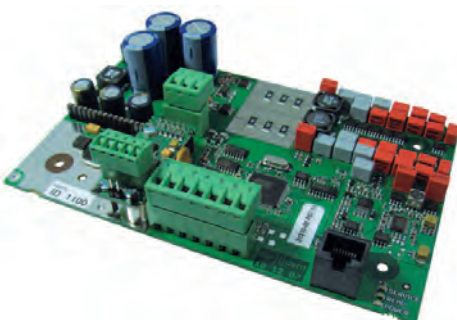
AWL100



#### AWL100 Wi-Fi Module

Networking Standards	IEEE 802.11 b/g
Data Rates 802.11 b	1, 2, 5.5, 11 Mbps
Data Rates 802.11 g	6, 9, 12, 18, 24, 36, 48, 54 Mbps
Frequency Band	2.412 - 2.484 GHz
Range	up to 300 meters in open air
Antenna	on-board chip antenna
Modulation 802.11 b	DSSS (CCK-11, CCK-5.5, DQPSK-2, DBPSK-1)
Modulation 802.11 g	OFDM
Wi-Fi security	WEP, WPA, WPA2
Protocol	TCP, UDP
Power consumption	850 mW max. (provided by ASR550)

ASY100



#### ASY100 Module for wired ISO Synchronisation

In case the wireless synchronisation regarding ISO11785 of the ASR550 will not work good enough, (e.g. because of a high noise level, to long distance or not constant reading) the ASY100 module will provide a wired synchronisation of the reader timing with cable lengths up to 100 meter.

#### AWL100 Wi-Fi Module

Wired ISO Synchronisation	Cable length up to 100 m
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