



# AMS 300*i*

Laser distance measurement device for maximum accuracy

*integrated* connectivity.



# UNCOMPROMISING EXACT — LIMITLESS COMPATIBLE

The AMS 300i—leading in measuring dynamic, functionality and variety of integrated interfaces.

*integrated*connectivity.



## MEASURE DISTANCES— FAST AND ACCURATELY

The AMS 300i is used wherever position data of moving system components, such as in high-bay warehouses, needs to be detected quickly and reliably.

The unique selection of interfaces makes the AMS 300i a truly global player. Measurement data can, in part, even be output in parallel on two interfaces, e.g., for diagnostic and control purposes.



## EASY HANDLING — UNCOMPLICATED INTERFACE SELECTION

Through the use of the latest signal processors, distances of up to 300 m are calculated with maximum accuracy and extremely quickly — in intervals on the order of milliseconds. Borderline situations can also be detected and indicated with the integrated, extensive functionality catalog of devices. Extensive diagnostic functions also make possible timely prefailure messages.

### *intergated*connectivity.

- **All major fieldbuses**  
are integrated directly in the device
- **For Ethernet models,**  
a switch is provided for setting up a line or ring structure
- **Configuration**  
is performed directly in and via the control
- **In the event that a replacement should be necessary,**  
all parameters are automatically transferred to the new device via the fieldbus
- **With PROFIBUS and PROFINET,**  
a parallel SSI interface is available

### *think*modular.

- **A number of selectable functions**  
can be optimally adapted to your application.  
Interfaces, heating, operating ranges

### *easy*handling.

- **Integrated mounting solution**  
for the easy alignment and fastening of the set alignment
- **Interference-free parallel operation**  
with optical data transceivers DDLS 200 and DDLS 500
- **Red light laser**  
for simple alignment
- **Through the mechanical fastening**  
(ball mount), the device does not need to be retightened following a device exchange
- **5 language display**
- **Standard M12 connection technology**

### *availability*control.

- **Through the constant monitoring of**  
relevant parameters, such as laser, temperature, received signal level, position window or speeds, the system can output a message in good time before a failure occurs, thereby allowing the device to be checked and serviced in advance

# CONVINCING IN ALL AREAS

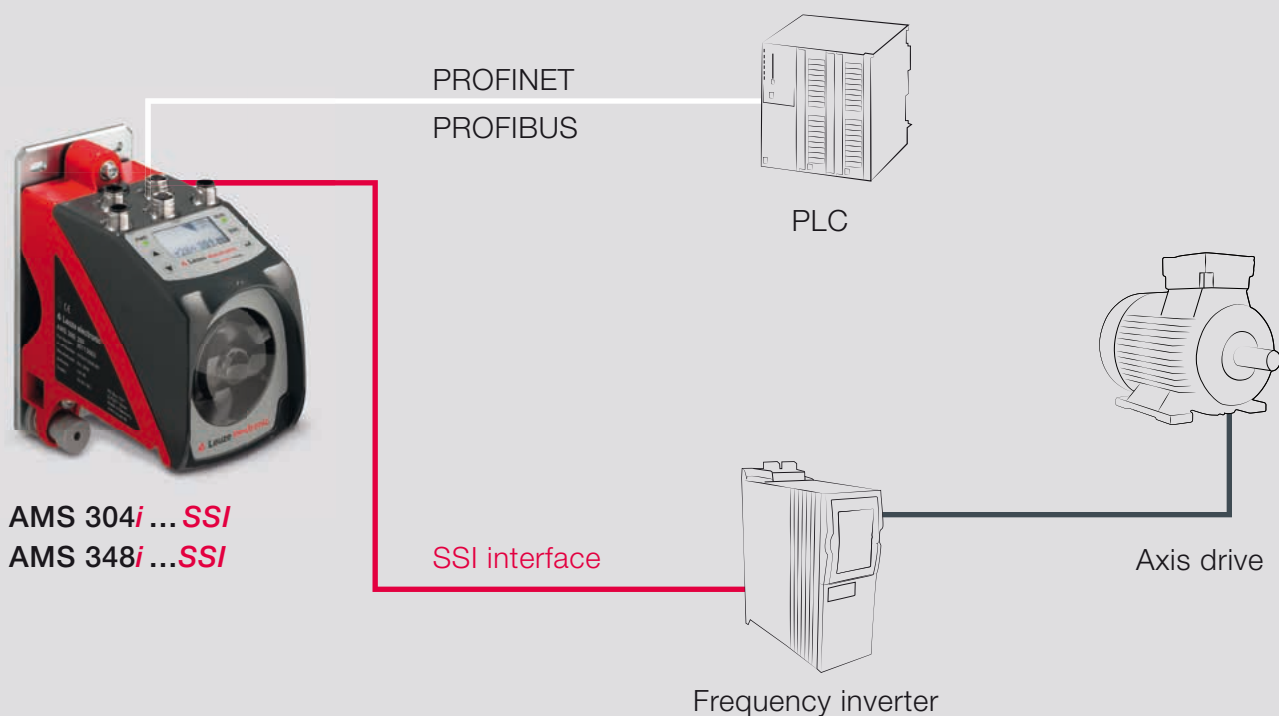
Absolute accuracy, failure protection and simple handling make the AMS 300i the right choice.

## *integrated* connectivity.

The data of an AMS 300i model can, for example, be output simultaneously via two parallel interfaces. Configuration and output of the position values and diagnostic data take place here via the PROFIBUS or PROFINET interface. At the same time, the position data is output via the SSI interface and can, thus, be used to control the motor.

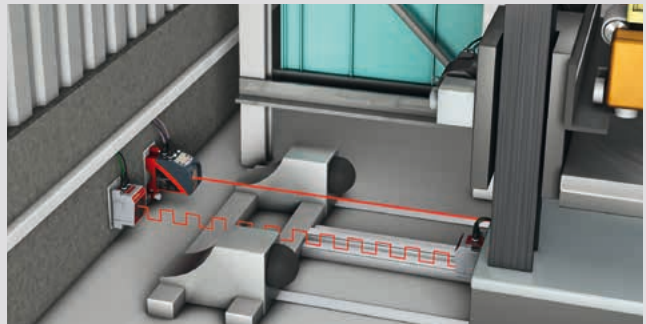
The following actions can be performed in parallel with the two parallel interfaces:

- Configuration
- Diagnostics
- Visualization
- Positioning



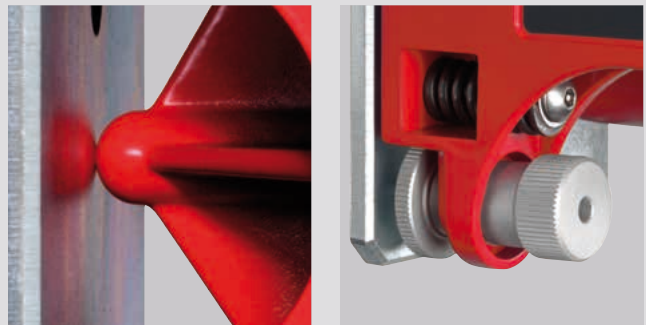
### **easy**handling.

The AMS 300i can be mounted directly next to an optical data transceiver without any mutual interference occurring between the two systems. As a result, both devices can also be used in situations with limited installation space.



### **easy**handling.

The integrated alignment and fastening unit is used to align the device. Thanks to the absolute linear accuracy and a ball mount, reteaching is not necessary following an exchange.







### **availability**control.

Diagnosis can be performed directly on the device via the five-language display. Data such as soiling control can also be transferred to the control via the interfaces.



# TECHNICAL DATA AND ACCESSORIES

Technical Data	AMS 3xxi 40	AMS 3xxi 120	AMS 3xxi 200	AMS 3xxi 300
Range [m]	0.2 – 40 m	0.2 – 120 m	0.2 – 200 m	0.2 – 300 m
Accuracy	±2 mm	±2 mm	±3 mm	±5 mm
Consistency / 1 sigma	0.3 mm	0.5 mm	0.7 mm	1.5 mm
Light spot diameter	≤40 mm	≤100 mm	≤150 mm	≤220 mm
Max. traverse rate	≤10 m/s			
<b>Electrical data</b>				
Supply voltage	18 – 30 VDC			
Current consumption	250 mA without heating / 500 mA with heating			
<b>Optical data</b>				
Transmitter	Laser diode, red light, wavelength 650 – 690 nm			
Laser class	Laser class 2 acc. to EN 60825-1; CDRH			
<b>Environmental conditions</b>				
Operating temperature	-5 – 50 °C without heating / -30 – 50 °C with heating			
Degree of protection	IP 65			
<b>Interfaces</b>				
	PROFIBUS, PROFINET, DeviceNet, CANopen, EtherNet IP, EtherCAT, Ethernet, SSI, RS 232 / 422 / 485, Interbus			
<b>Certifications</b>				
	   			

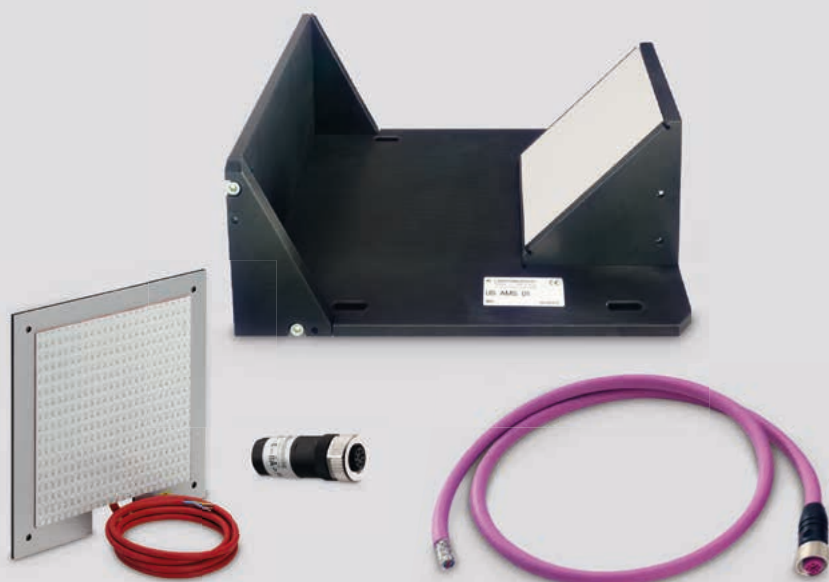
## MODELS

- Integrated heating down to -30 °C
- Connections M12
- Operating range 40 / 120 / 200 / 300 m
- Address setting and diagnosis via display

## ACCESSORIES

We also have all the necessary accessories for the optimal mounting and connection of our laser distance measurement devices in our product range:

- Reflective tapes
- Heated and unheated pre-mounted reflectors
- Connection cables and connectors
- Deflecting mirror



# OUR PROMISE TO YOU

## SMARTER **PRODUCT USABILITY**

With regard to our product developments, we systematically place emphasis on the especially good usability of all devices. To this end, simple mounting and alignment are taken into account — just as the uncomplicated integrability of the sensors in existing field bus systems and easy configuration, e.g. via a web browser, are.

## SMARTER **APPLICATION KNOW-HOW**

Whoever can do it all, can do nothing right. Which is why we concentrate on selected target sectors and applications. There, we are specialists and know all aspects inside out. For this purpose, we optimize our solutions and offer a comprehensive product range that makes it possible for our customers to obtain the absolute best solutions from a single source.

## SMARTER **CUSTOMER SERVICE**

The technical and personal closeness to our customers, and a skilled, straightforward handling of queries and problems, are among our strengths — and will remain so. Consequently, we will continue to expand our service offerings and, indeed, also forge ahead in new directions to persistently redefine the utmost in customer service. Whether on the phone, in the Internet or on-site with our customers — regardless of when and where the expertise of the sensor people is needed at any time.

Info at: [www.leuze.com](http://www.leuze.com)



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**SENSOR**  
BUSINESS

Katrin Rieker,  
Sales Methods, Processes, Tools

### **Switching Sensors**

Optical Sensors  
Ultrasonic Sensors  
Fiber Optic Sensors  
Inductive Switches  
Forked Sensors  
Light Curtains  
Special Sensors

### **Measuring Sensors**

Distance sensors  
Sensors for Positioning  
3D Sensors  
Light Curtains  
Forked Sensors

### **Products for Safety at Work**

Optoelectronic Safety Sensors  
Safe Locking Devices, Switches and Proximity Sensors  
Safe Control Components  
Machine Safety Services

### **Identification**

Bar Code Identification  
2D-Code Identification  
RF Identification

### **Data Transmission/ Control Components**

MA Modular Connection Units  
Data Transmission  
Safe Control Components

### **Industrial Image Processing**

Light Section Sensors  
Smart Camera

