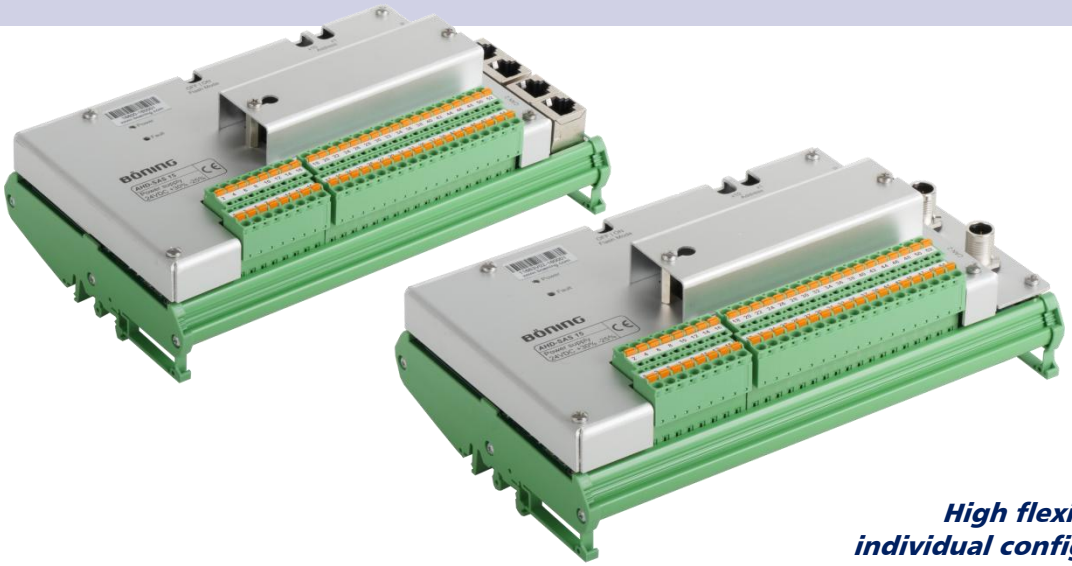
AHD-SAS 15 M12 / AHD-SAS 15 RJ45
Data station with 15 inputs for analog and binary sensors



High flexibility by individual configuration of inputs with input modules

Decentralized operation with data communication via CAN bus

Usable as independently operating alarm and monitoring system

The data station AHD-SAS 15 M12/RJ45 is used in alarm, monitoring and control systems for the acquisition, processing and monitoring of all kind of sensor values.

All common type of sensors can directly be connected and evaluated. The communication with the system's displays (like e.g. the 8.8" color display AHD 880 TC or the 19" panel PC AHD 1219 G) for presentation the of the data is carried out via CAN bus.

We offer two variants for the connection to the CAN bus: AHD-SAS 15 M12 is equipped with DeviceNet connectors; AHD-SAS 15 RJ45 provides Ethernet connectors (RJ45).

The data station is equipped with 15 inputs for the acquisition of analog or binary signals. The different types of input signals like e.g. resistance (max. 3300 Ohms), voltage (max. 44 V), current (max. 25 mA), binary inputs (contact or switched voltage) and NiCrNi sensors can be configured individually for each single input channel with pluggable input modules. This ensures a high level of flexibility.
Usage of non-linear sensors (e.g. for tank content measurements) is easily possible.

Furthermore, additional virtual input channels can be created, whose resulting data are calculated from the inputs of multiple physical sensors, e.g. the total fuel as the sum of the contents of several tanks or the calculation of the mean value of exhaust gas temperatures from all cylinders of a Diesel engine.

In general, data processing and alerting are performed in Panel PCs AHD 12xx or Data Processing Stations AHD-DPU 9. In this case, the user has the advantage that he can modify system settings on a display.

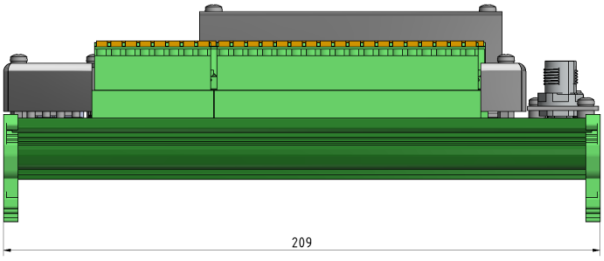
If no such device is in the Böning alarm, monitoring and control system, AHD-SAS 15 M12/RJ45 is configured to perform these tasks autonomously.

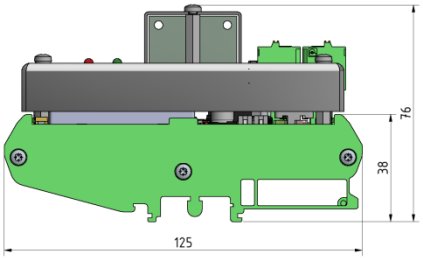
The device is equipped with inputs for the connection to Binary Data Stations AHD-PS 15/30/47 and outputs for the connection to Relay Stations AHD-R101.

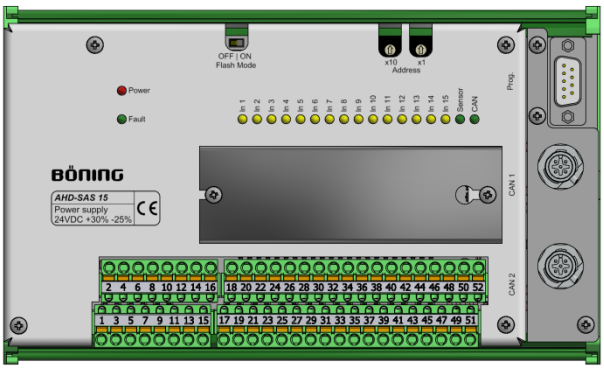
The Relay Stations AHD-R101 can be used to signal alarms with e.g. horns or luminous call systems. If the device processes its data autonomously, integrated status LEDs display each input's alarm state.

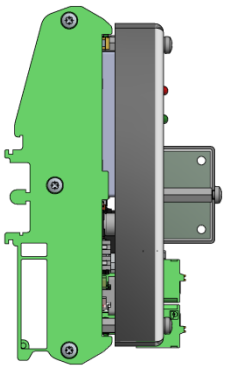
BÖNING
Automationstechnologie

AHD-SAS 15 M12

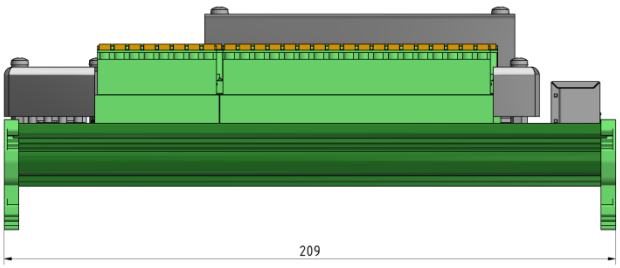


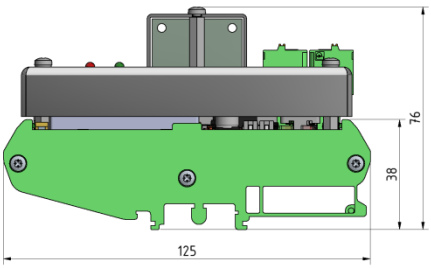


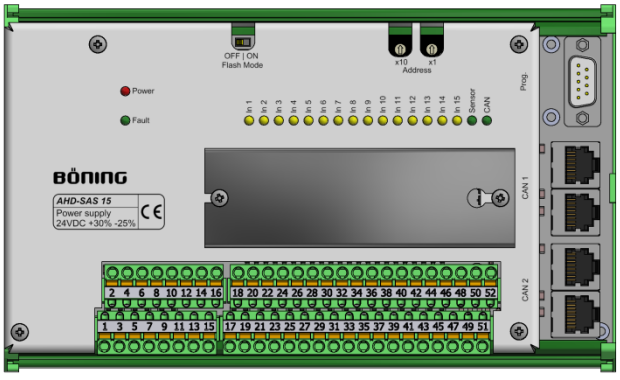


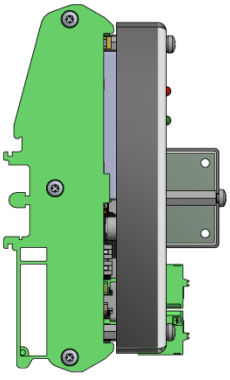


AHD-SAS 15 RJ45

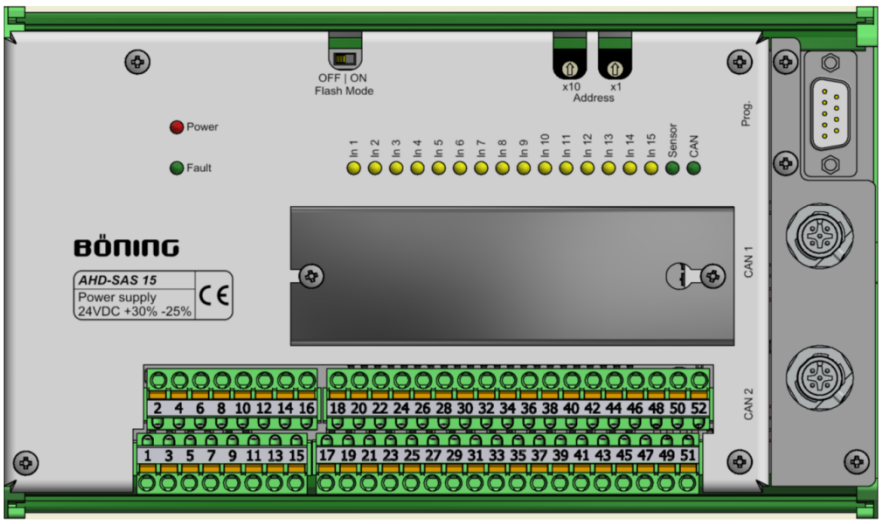


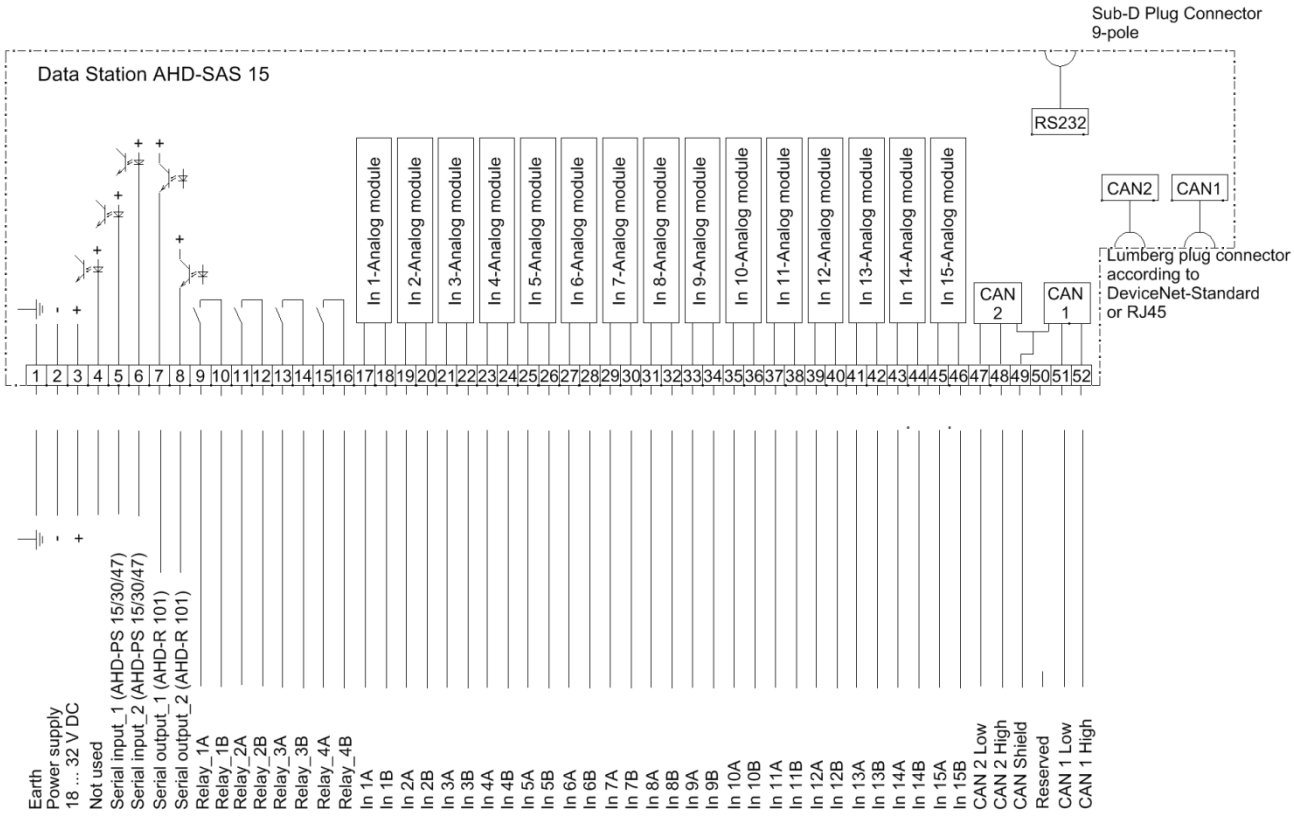






Connection


OFF | ON
Flash Mode
x10
x1
Address
Power
Fault
In 1
In 2
In 3
In 4
In 5
In 6
In 7
In 8
In 9
In 10
In 11
In 12
In 13
In 14
In 15
Sensor
CAN
Prog.
BÖNING
AHD-SAS 15
Power supply
24VDC +30% -25%
CE
CAN 1
CAN 2
2 4 6 8 10 12 14 16
18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52
1 3 5 7 9 11 13 15
17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51


Sub-D Plug Connector
9-pole
Data Station AHD-SAS 15
RS232
CAN2
CAN1
Lumberg plug connector
according to
DeviceNet-Standard
or RJ45
In 1-Analog module
In 2-Analog module
In 3-Analog module
In 4-Analog module
In 5-Analog module
In 6-Analog module
In 7-Analog module
In 8-Analog module
In 9-Analog module
In 10-Analog module
In 11-Analog module
In 12-Analog module
In 13-Analog module
In 14-Analog module
In 15-Analog module
CAN 2
CAN 1
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52

Earth
Power supply
18 ... 32 V DC
Not used
Serial input_1 (AHD-PS 15/30/47)
Serial input_2 (AHD-PS 15/30/47)
Serial output_1 (AHD-R 101)
Serial output_2 (AHD-R 101)
Relay_1A
Relay_1B
Relay_2A
Relay_2B
Relay_3A
Relay_3B
Relay_4A
Relay_4B
In 1A
In 1B
In 2A
In 2B
In 3A
In 3B
In 4A
In 4B
In 5A
In 5B
In 6A
In 6B
In 7A
In 7B
In 8A
In 8B
In 9A
In 9B
In 10A
In 10B
In 11A
In 11B
In 12A
In 12B
In 13A
In 13B
In 14A
In 14B
In 15A
In 15B
CAN 2 Low
CAN 2 High
CAN Shield
Reserved
CAN 1 Low
CAN 1 High

Technical Data

Mechanical Data	
Dimension W x H x D	209 x 125 x 76 mm
Weight	appr. 0.7 kg
Environmental Data	
Operating Temperature	-30°C … +70°C
Storage Temperature	-50°C … +85°C
Degree of Protection	IP 20
Required Distance to Compass	Standard magnetic compass: 50 cm Steering magnetic compass: 40 cm
Electrical Data	
Power Supply	24 V DC (+30% -25%)
Current Consumption	max. 700 mA (24 V DC)
Interfaces	
Interfaces	2 x CAN bus (CAN1 and CAN2, DeviceNet or RJ45) 2 x CAN bus (CAN1 and CAN2 additionally on terminal strip) 1 x RS232 (9-pole Sub-D)
Inputs	15 x Slot for binary and analog inputs, freely and individually equipable with analog modules according to the project specific configuration 2 x serial (opto-coupler) from binary data stations AHD-PS 15/30/47
Outputs	4 x potential free relay contact, 30 V DC/2 A max, freely configurable 2 x serial (opto-coupler) to relay station AHD-R101
Installation	
	Installation directly on DIN rails TS 32 or TS 35
Approvals	
Classification Societies	ABS DNV GL LR RS
Part Numbers	
AHD-SAS 15 M12	11663V02
AHD-SAS 15 RJ45	16800

Input Modules

Type	Input signal type:
Analog module B	Current sensor 4 – 20 mA, 2-pole
Analog module C	Current sensor 4 – 20 mA, 4-pole
Analog module E	Contact, UBat+ switched
Analog module F	Contact, potential free
Analog module F	Contact, UBat- switched
Analog module F	Transistor output, UBat- switched
Analog module G	Thermo resistance sensor PT100 (up to 220°C)
Analog module H	Thermo resistance sensor PT1000 (up to 220°C)
Analog module I	Thermo voltage sensor NiCrNi (up to 950°C)
Analog module J	Voltage sensor 0 – 5 V DC
Analog module K	Voltage sensor 0 – 10 V DC
Analog module L	Voltage sensor 0 – 30 V DC
Analog module M	RACOR Water detection
Analog module N	Frequency sensor 8 kHz
Analog module O	Blank module
Analog module P	Current sensor 20 mA, 2-pole differential
Analog module R	Thermo resistance sensor PT100 (up to 650°C) or PTC, NTC (68..330 Ohms)
Analog module S	Thermo resistance sensor PT1000 (up to 650°C) or PTC, NTC (680..3300 Ohms)
Analog module T	Voltage sensor 0 – 45 V DC
Analog module U	Resistance sensor 200 Ohms insulated
Analog module V	Voltage sensor 0 – 45 V DC insulated