



### Model number

#### VAZ-ANALYZER

AS-Interface Analyzer

### Features

- Trigger function
- Telegram memory
- Error statistic with benchmark
- Actual value indication
- Visualization and Evaluation Software on the PC

### Technical data

#### General specifications

AS-Interface specification	V3.0
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#### Functional safety related parameters

MTTF <sub>d</sub>	280 a at 30 °C
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#### Indicators/operating means

LED POWER	AS-Interface voltage; LED green
LED SER ACTIVE	interface in operation; LED green
LED Test	Test mode; LED green/red

#### Electrical specifications

Insulation voltage	$U_i$	$\geq 500$ V
Rated operating current	$I_e$	approx. 70 mA
Power supply	from AS-Interface	

#### Interface

Interface type	AS-Interface: Screw terminal Trigger: Screw terminal (Input: 24 V; Output: TTL) PC: RS 232 with 9-pin Sub-D Socket
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#### Ambient conditions

Ambient temperature	0 ... 55 °C (32 ... 131 °F)
Storage temperature	-25 ... 70 °C (-13 ... 158 °F)

### Notes

If errors occur in an AS-Interface network, practically all the errors in the network can be identified with the VAZ-ANALYZER.

1. In the Statistics Mode a statistical analysis is carried out of all messages transferred in the network. The central figure is a 'Traffic light' representation (Green-yellow-red), which evaluates the communication capability of each slave and thus provides the user with an image of the function of the investigated network. It warns when a slave shows more than 1% repetitions within one second (Yellow), and signals an error if the repetitions exceed 5% or intermittently a slave fails completely (Red).

A more detailed analysis is provided in the case of a consecutive error: Through a division of the repetitions into various classes a measure is obtained of how high the risk is of a "Config-Error". If a valid message is always achieved after the first repetition, then this risk is minimal; if 5 or 6 messages are frequently necessary, then this risk is high.

This test of a network (With traffic light representation or consecutive error) is therefore particularly recommended when using an AS-Interface bus termination.

2. The complete documentation of the actual status of a system can be obtained by means of a log printout. It comprises the overview (Traffic lights), the previously found configuration, the expanded statistics and the consecutive error and can be supplemented with information on the system. The log can, for example, be used as an acceptance report with configuration, error frequency and type of error.

3. The Data Mode shows the analyser the current digital and analogue I/O values of the slaves.

4. The Trace Mode makes available the entire messages, complete or filtered. The most important example is the analysis of switch-off situations in Safety-at-Work applications. In this case a trace can be evaluated with the "Safety monitor" function and through the triggering every change in the condition of the system leading up to the switch-off procedure can be reconstructed. In addition, the trace mode makes application data available in a 150 µs rhythm, which permits targeted individual sections of an application to be investigated.

#### Delivery package

The delivery package includes the Sub-D data cable, a USB-adaptor and software.