SIPOS
AKTORIK

SIMA
Master Station
Actuator control system

- Operation
- Parameterization
- Observing
- Diagnosis

Actuator control system and Actuators from a single source

1 SIMA hardware

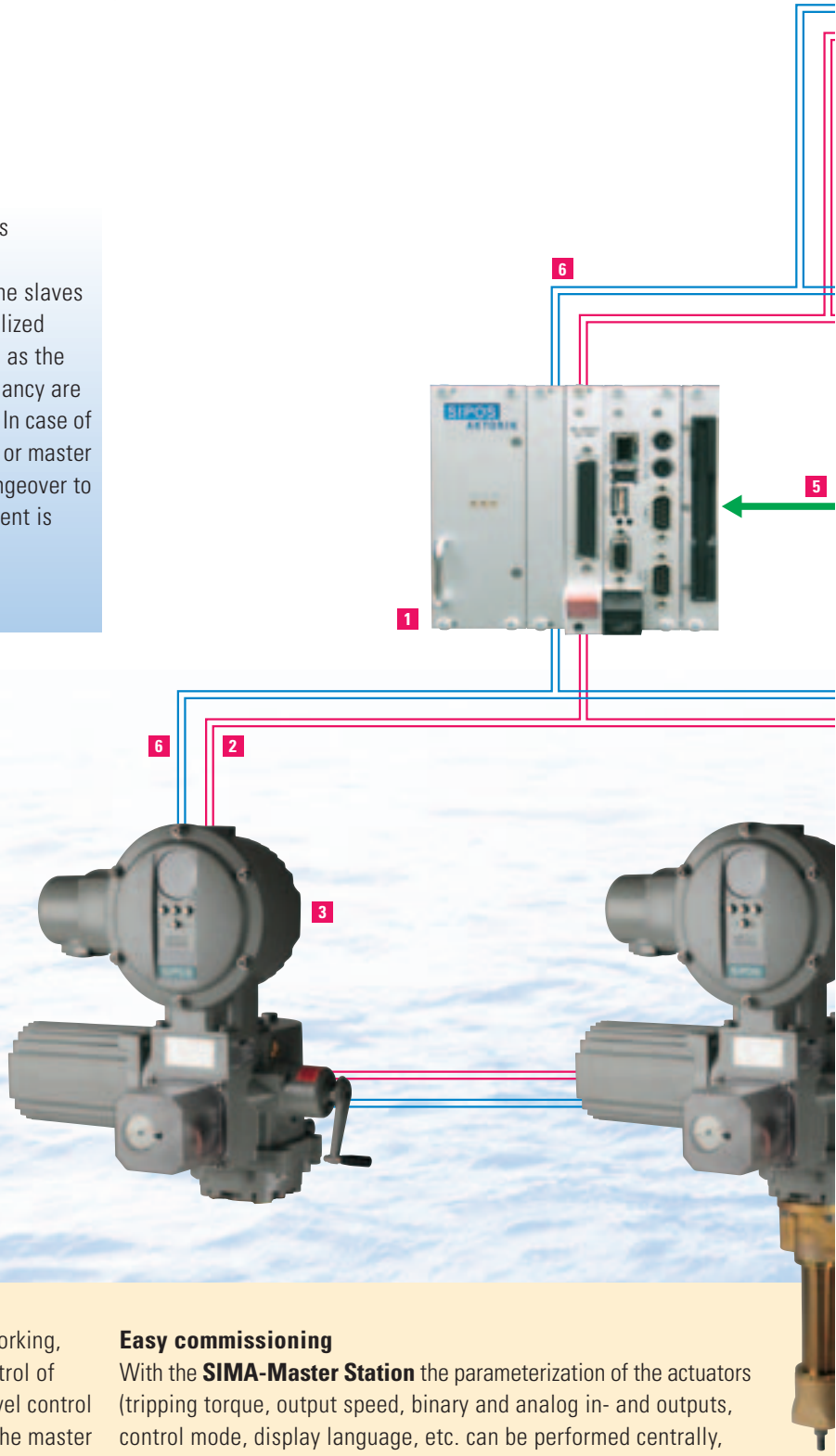
The **SIMA-Master Station** is based on standardised industrial computer components, expanded by the required fieldbus interfaces. The entire hardware is integrated in a 19" industrial housing with EMC protection.

2 Redundancy

SIMA supports various redundancy concepts.
Cable redundancy to the slaves and/or to the decentralized control system as well as the **SIMA-Master** redundancy are available as an option. In case of loss of communication or master failure, automatic changeover to the redundant component is possible.

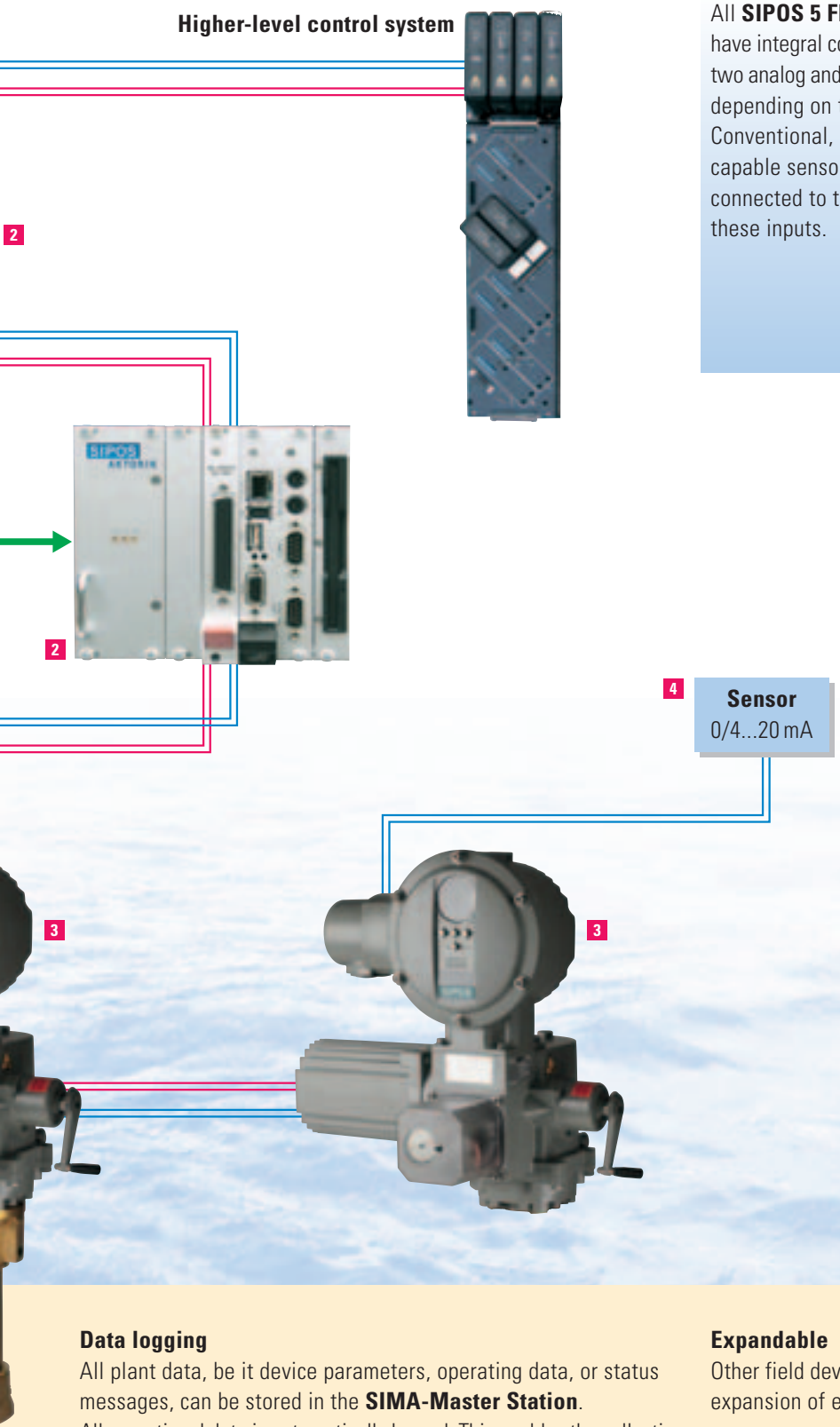
3 Field devices (slaves)

SIMA is designed for the control of **SIPOS 5 Flash actuators** (Rotary actuators, Linear actuators and Part-turn actuators). Since the communication is performed according to the standardised fieldbus protocols PROFIBUS-DP or MODBUS-RTU, any field device (actuators and sensors) conforming to these standards can be integrated.



The actuator control system **SIMA** is an autonomously working, fieldbus-based master station, basically designed for control of **SIPOS 5 Flash actuators**. The integration to a higher-level control system is supported. The comprehensive functionality of the master station offers several advantages:

Easy commissioning
With the **SIMA-Master Station** the parameterization of the actuators (tripping torque, output speed, binary and analog in- and outputs, control mode, display language, etc. can be performed centrally, "non-intrusive". If the **SIMA-Master Station** is to be integrated in a DCS, it can be implemented like any other field device.
The actuators on the subordinate level are controlled by the **SIMA**.



4 Binary / analog inputs

All **SIPOS 5 Flash actuators** have integral controls and include two analog and four binary inputs, depending on the model. Conventional, non-fieldbus capable sensors can be connected to the fieldbus via these inputs.

5 Synchronisation

Master and stand-by master are coordinated via a direct connection. This prevents both **SIMA-Masters** from communicating simultaneously with the field devices or the higher-level control system via the bus. If the master fails, the operation will automatically be resumed by the stand-by master (hot stand-by).

6 Communication

SIMA supports the standardised fieldbus protocols PROFIBUS-DP or MODBUS-RTU for the communication with the attached field devices. A screened 2-wire copper cable, fibre optic cable, or radio signal can be utilized as transmission medium as specified in the fieldbus standards.
Up to 32 devices can be connected to a single bus segment; when using repeaters, up to 127 devices are possible.
Communication with a higher-level control system is also performed according to above-mentioned standards. In addition, Device-Net, Ethernet or a RS 232 interface with a protocol to be defined, can also be used.

Data logging

All plant data, be it device parameters, operating data, or status messages, can be stored in the **SIMA-Master Station**.
All operational data is automatically logged. This enables the collection of information on the operation time, the number of starts, etc. of the connected field devices. If evaluated correctly, preventive maintenance, for example, is possible.

Windows user interface

The standard Office programs can be run on the master. For this reason, all data can easily be accessed e.g. via an Excel table or a parameter list in Word format.

Expandable

Other field devices (slaves) can easily be added which facilitates the expansion of existing plants considerably.

Monitoring via Internet

Online access via the World Wide Web by means of the integral http-server.

Decentralized operation / monitoring

The SIMA can be monitored and controlled from different points within the plant.

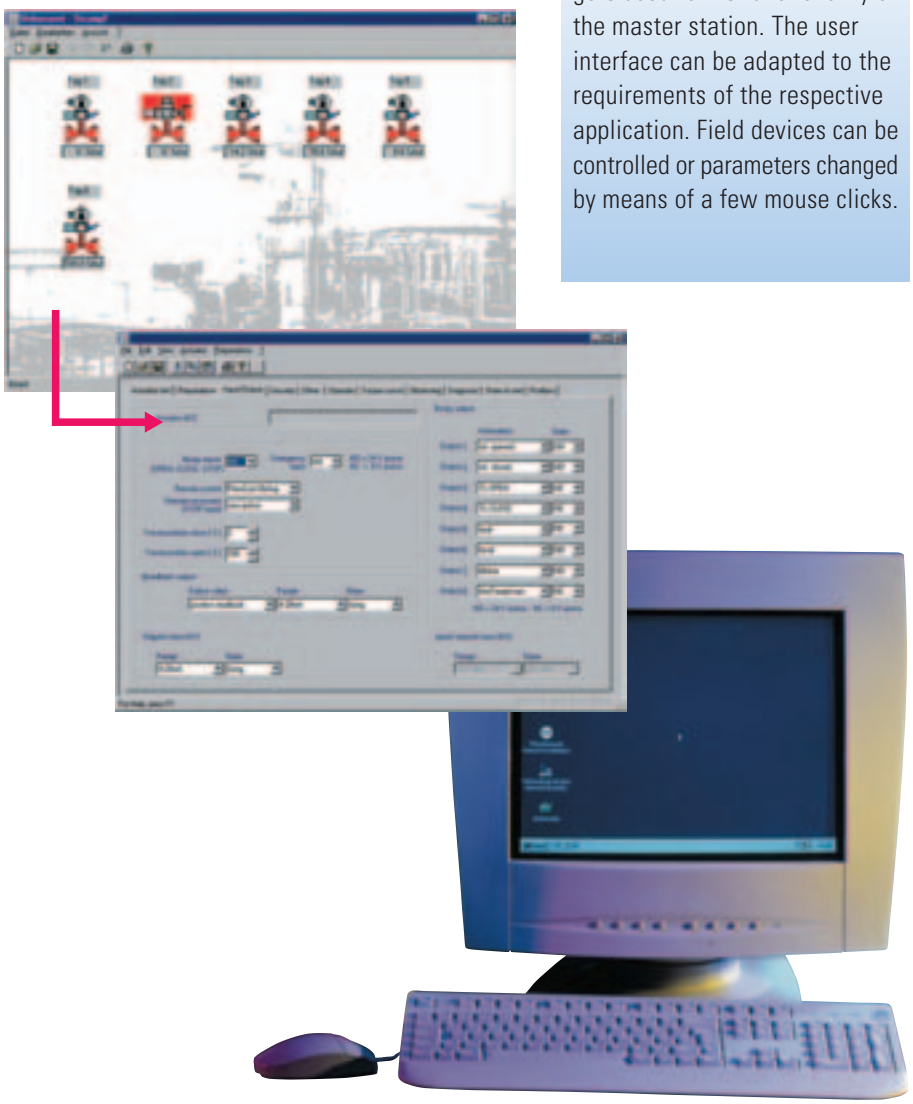
User interface

Autonomous system

SIMA is an independent actuator control system not requiring continuous access options. For commissioning, programming or visualisation, the **SIMA-Master Station** can be connected to a monitor, keyboard and mouse or to a laptop-PC.

Easy operation

Special training for the operation is not required. Due to the graphic user interface, the user easily gets used to the functionality of the master station. The user interface can be adapted to the requirements of the respective application. Field devices can be controlled or parameters changed by means of a few mouse clicks.



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