

# Maximum security and redundancy in building automation!

## CAN-HSB

### CAN-HSB High Safety ring Bus

With the CAN-HSB (High Safety ring Bus), DEOS AG offers the next step of the worldwide approved CAN-bus.

For the safe operation of CAN-HSB both CAN-interfaces of an OPEN 3100 C2 or an OPEN 4100 C2 are used. For these devices the following two operating modes are available. They can be individually activated by service technicians:

- In the standard mode both CAN-bus interfaces are used independently.
- In the CAN-HSB mode both CAN-bus interfaces are integrated in the safety ring.

The CAN-HSB extends the function- and diagnostic abilities of a standard CAN-bus and offers additional security features. In case of a broken CAN-bus a diagnostic process is run to localize the cause of the failure easily. In case an interrupt occurs the complete CAN-bus remains fully operational due to the redundant access.

The image shows two screenshots of the CAN-HSB diagnostic software. The top screenshot displays 'CAN1 / CAN-Ring HSB (High Safety Bus)' settings, including Port (1), Baud Rate (5000), and Mode (NORMAL). It also shows CAN Bus Statistics with a Ring Status of 'FAULT' and a CAN Quality of 0. The bottom screenshot shows a 'CAN List Of Device' table with columns for DetectionTime, Addr, Status, SenderTyp, Ser, HW, SW, HWTYP, NotFou, and Restart. The table lists several active devices, including DIBDOBT, AIB, AQ4, AEB, and AEB.

To support a fast and easy repair of the interrupt, the communication is logged and a detailed report shows which IO modules can still be addressed.

As in standard mode up to 99 COSMOS IO modules can be connected to a CAN-HSB at the same time. A modification of the control program is not necessary for using HSB.

By functional program modules, which are especially designed for CAN-HSB, additional status information of the current operating state is provided and evaluated. Due to this permanent online monitoring the high availability of the bus-communication is achieved.

