



ESX®-DIOS

ESX®-DIOM

# ESX

I/O modules  
for mobile applications  
with  
CAN-Bus/CANOpen

## I/O modules for mobile applications ESX<sup>®</sup>-DIOS, ESX<sup>®</sup>-DIOM

- I/O module for mobile applications extends the I/O capability of a master controller using the CAN-Bus (CANopen protocol or layer 2)
- Customer specific default settings for bit rate and module basis address, software configurable
- **ESX<sup>®</sup>-DIOS:** I/O slave module with max. 8 outputs and 2 inputs or max. 10 inputs
- **ESX<sup>®</sup>-DIOM:** I/O slave module with max. 24 outputs and 2 inputs or max. 26 inputs
- Automatic recognition of 9 different slot positions (module coding) using 2 tristate pins
- Adequate measures for EMC and robust housing for the toughest mobile requirements
- All outputs are diagnosable
- All inputs and outputs are protected against voltage overload and against short circuit to ground/ supply voltage
- Safety relay as switch-off alternative
- Direct driving of proportional valves saves expensive driver and/or controller boards

Technical Data	ESX <sup>®</sup> -DIOS				ESX <sup>®</sup> -DIOM			
	A	B	C	D	A	B	C	D
Models (other variations on request)	A	B	C	D	A	B	C	D
Digital-/PWM-output (4 A high side) 0..100% 100 Hz or 200 Hz tact (12 bit resolution), current measurement/regulation (10 bit resolution)	-	-	4	4	-	-	12	12
Digital outputs (4A high side)	-	8	-	4	-	24	-	12
Digital inputs with internal pulldown (Detection level approx. ca. 67% U <sub>B</sub> )	8	-	4	-	24	-	12	-
Tristate inputs for coding modules in slot	2 pins (open, jumper to GND or U <sub>B</sub> ), internal voltage divider							
CAN-Bus interface	CAN 2.0B, Full CAN, low or high speed to 1Mbit/s							
Processor system	Siemens C505CA (8 bit)							
Supply voltage (U <sub>B</sub> , battery)	9..32 V continuous							
Current requirements	<0,2 A (without load) Total current max. 30A				<0,4 A (without load) Total current max. 70A			
Connector	16 pin automotive type (AMP)				42 pin automotive type (AMP)			
Dimensions	approx. 97 x 125 x 45 mm (38.1" x 49.2" x 17.7")				approx. 154 x 169 x 52 mm (60.6" x 66.5" x 20.4")			
Weight	approx. 0,5 kg				approx. 1 kg			
Chassis	IP 65 (IP 67 on request), cast aluminium, GORE-TEX <sup>®</sup> breathing filter for pressure equalization and high moisture protection							
Operating temperature range	-40...+85°C (chassis)							

