

Pioneering new technologies
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Sensor-Technik Wiedemann GmbH
Mobile Controllers and Measurement Technologies

ESX[®]-10X



Input-Output module for
vehicles and machines with CAN-Bus



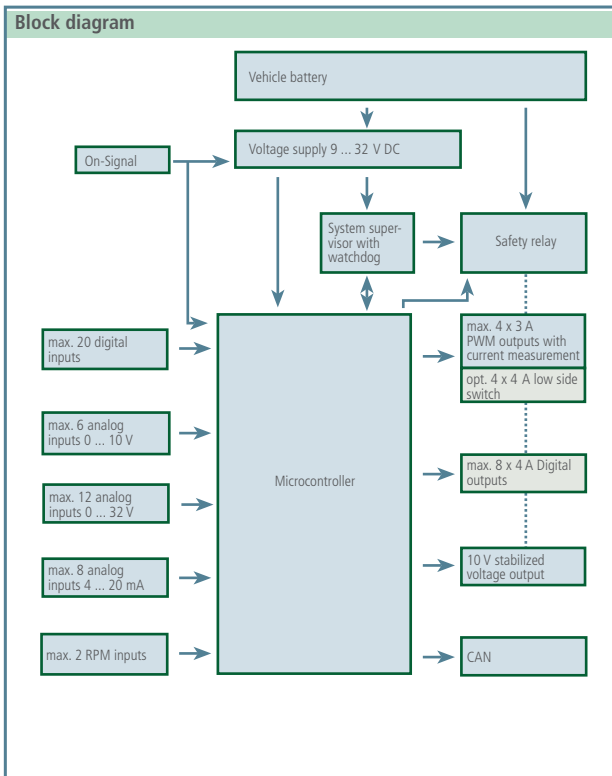
ESX®-IOX - Technical data

Processor System	
Processor	16MHz
Interfaces	
CAN	2.0 B (11 Bit and 29 Bit Identifier), Full CAN, Low- / High-Speed up to 1 Mbit/s
In-/Outputs (max. 28)	
Digital inputs	max. 20 digital inputs , short-circuit protected
RPM inputs	max. 2 RPM inputs , cut-off-frequency 8 kHz, short-circuit protected
Analog inputs	max. 12 analog inputs, 0 ... 32 V , 10 Bit, short-circuit protected
	max. 6 analog inputs, 0 ... 10 V , 10 Bit, short-circuit protected
	max. 8 analog inputs, 4 ... 20 mA , 10 Bit, short-circuit protected
PWM outputs with current measurement	max. 4 x 3 A , high side switch, 0 ... 100 %, short-circuit protected, diagnosable optionally with 4 x 4 A additional low side switches, applicable as a motor bridge, short-circuit protected, diagnosable
Digital outputs	max. 8 x 4 A , high side switch, short-circuit protected, diagnosable
Stabilized voltage output	10 V (max. load current 100 mA), stabilized supply voltage, short-circuit protected

System data	
Voltage supply	9 ... 32 V DC
Current requirements	approx. 100 mA without external load, Stand-by < 1.5 mA, max. total current 11 A

Mechanical data	
Connector	42 pol. automotive type (Tyco / AMP)
Chassis	IP67 and IP69k
Weight	0.3 kg (0.67 lbs)
Dimension	ca. 177 mm x 135 mm x 35 mm (4.61" x 5.31" x 1.38")

EMC, Environmental requirements	
Requirements	According to automotive, agricultural and construction industry standards, CE-conformity
Operating temperature	At work: -40° C ... +80° C (-40° F ... +176° F) chassis temperature



Pin assignment				
PIN	Option 1	Option 2	Option 3	Option 4
2	UIN (0 ... 32 V) / DIN	DIN	DIN	DOut
3	UIN (0 ... 32 V) / DIN	DIN	DIN	DOut
4	UIN (0 ... 32 V) / DIN	DIN	DIN	DOut
5	UIN (0 ... 32 V) / DIN	DIN	DIN	DOut
6	UIN (0 ... 32 V) / DIN	PWM Out	PWM Out	PWM Out / LS
7	UIN (0 ... 32 V) / DIN	PWM Out	PWM Out	PWM Out / LS
8	UIN (0 ... 32 V) / DIN	PWM Out	PWM Out	PWM Out / LS
9	UIN (0 ... 32 V) / DIN	PWM Out	PWM Out	PWM Out / LS
10	UIN (0 ... 32 V) / DIN	DIN	DOut	DOut
11	UIN (0 ... 32 V) / DIN	DIN	DOut	DOut
12	UIN (0 ... 32 V) / DIN	DIN	DOut	DOut
13	UIN (0 ... 32 V) / DIN	DIN	DOut	DOut
18		RPM / DIN		
20		UIN (0 ... 10 V) / DIN		
21		UIN (0 ... 10 V) / DIN		
22		UIN (0 ... 10 V) / DIN		
24		IIN (4 ... 20 mA)		
25		IIN (4 ... 20 mA)		
26		IIN (4 ... 20 mA)		
27		IIN (4 ... 20 mA)		
32		+10Vext		
33		RPM / DIN		
34		UIN (0 ... 10 V) / DIN		
35		UIN (0 ... 10 V) / DIN		
36		UIN (0 ... 10 V) / DIN		
38		IIN (4 ... 20 mA)		
39		IIN (4 ... 20 mA)		
40		IIN (4 ... 20 mA)		
41		IIN (4 ... 20 mA)		



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