

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

ESX<sup>®</sup>-LT

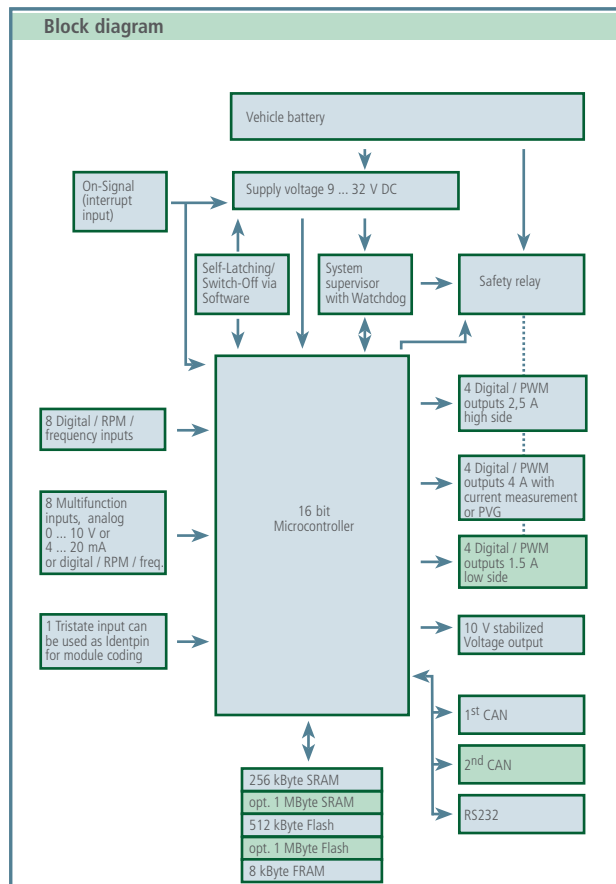


Freely programmable controllers for  
vehicles and machines with CAN-Bus



# ESX®- LT - Technical Data

Processor system	
Processor	16 bit controller, 20 MHz / 40 MHz and a system supervisor with watchdog
SRAM	256 kByte, optional 1 MByte
Flash	512 kByte, optional 1 MByte
FRAM / EEPROM	8 kByte
Interfaces	
CAN	1 <sup>st</sup> CAN, optional 2 <sup>nd</sup> CAN, 2.0 B (11 bit and 29 bit identifier), full CAN, low- / high-Speed up to 1 Mbit/s
RS232	programmable baud rate
Babyboard	for expansions
In-/Outputs	
Digital / RPM inputs	<b>8 inputs</b> , active high / low switch, can be used as RPM / frequency inputs, cut-off-frequency 6.1 kHz, short circuit protected
Multifunction inputs	<b>max. 8 analog inputs</b> , 4 ... 20 mA / 0 ... 10 V, cut-off-frequency 750 Hz, 10 bit, short-circuit protected or <b>max. 8 digital / RPM / frequency inputs</b> , active high / low switch, cut-off-frequency 750 Hz, short circuit protected
Tristate input	<b>1 input</b> can be used as idempin for module coding, short circuit protected
Digital / PWM outputs with current measurement or PVG outputs	<b>4 x 4 A</b> , high side switch, 0 ... 100 %, PWM-frequency 5 Hz ... 1 kHz, short circuit protected, diagnosable or PVG used for Danfoss valves (20% U <sub>B</sub> ... 80% U <sub>B</sub> ) (only in pairs per 2 pcs. possible)
Digital / PWM outputs	<b>4 x 2,5 A</b> , high side switch, 0 ... 100 % short circuit protected, <b>optional 4 x 1.5 A</b> , additional low side switch, short circuit protected, diagnosable
Constant voltage output	<b>10 V</b> , stabilized voltage supply, load current up to 400 mA, short circuit protected
System Data	
Voltage Supply	9 ... 32 V DC
Current requirements	operational about 0,5 A without external load, stand-by < 1 mA, max. total current 20 A
Mechanical data	
Connector	42 pin automotive type (Tyco / AMP)
Chassis	IP65, opt. IP67, die-cast aluminium, GORE-TEX® breathing filter for pressure equalization
Weight	approx. 1,0 kg (2.2 lbs)
Dimension	approx. 154 mm x 169 mm x 52 mm (6.06" x 6.65" x 2.05")
EMC, Environmental requirements	
Requirements	According to automotive, agricultural and construction industry standards; CE-conformity
Operating temperature	-40° C ... +85° C (-40° F ... +185° F) chassis temperature



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