

# DeviceNet Programmable Fieldbus Controller

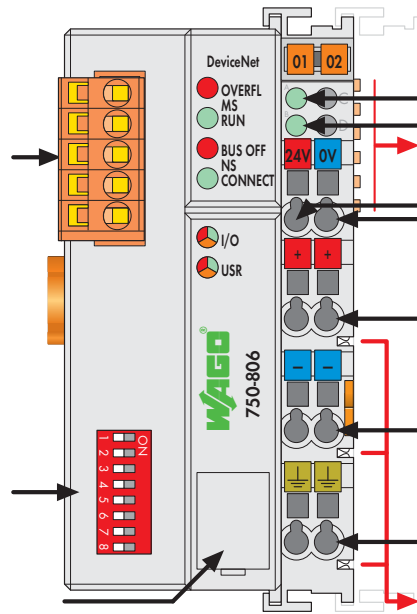
125 ... 500 Kbaud; digital and analog signals



Fieldbus connection Series 231 (MCS)

DIP switch for MAC ID and baud rate

Configuration and programming interface



Status voltage supply  
-System  
-Power jumper contacts  
Data contacts

Supply  
24 V  
0 V

Supply via power jumper contacts  
24 V

0 V



Power jumper contacts

The programmable fieldbus controller for DeviceNet™ combines the functionality of the DeviceNet™ fieldbus coupler with the functionality of a Programmable Logic Control (PLC).

Programming of the application is performed in accordance with IEC 61131-3. The programmer can access all fieldbus and I/O data.

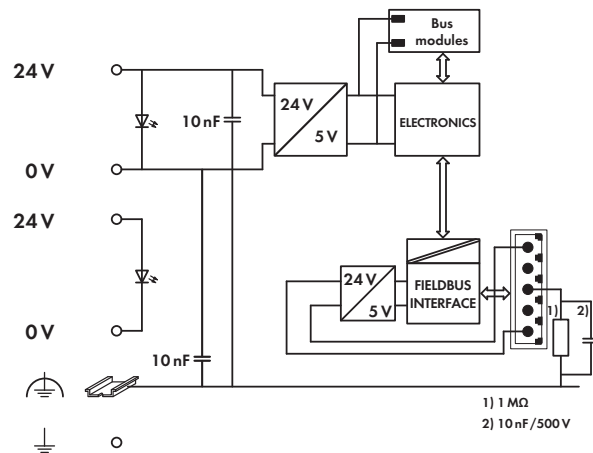
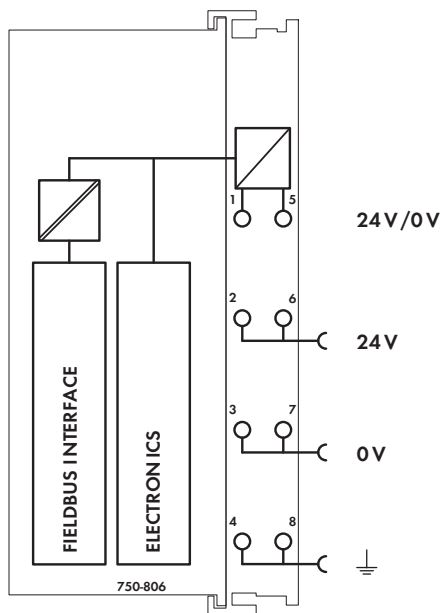
Characteristics and use:

- The use of decentralized control can better support a PLC or PC
- Complex applications can be divided into multiple tasks
- Programmable response in the event of a fieldbus failure
- Signal pre-processing reduces fieldbus transmissions
- Peripheral equipment can be controlled directly, resulting in faster system response times
- Simple, self-sufficient control

**Notice: EDS files required**

Description	Item no.	Pack. unit
Contr. DeviceNet	750-806	1
<b>Accessories</b>		
EDS files	Download: <a href="http://www.wago.com">www.wago.com</a>	
Miniature WSB quick marking system,		
plain	248-501	5
with marking	see pages 256 ... 257	
<b>Approvals</b>		
Conformity marking	CE	
UL 508		
ANSI/ISA 12.12.01	Class I, Div. 2, Grp. ABCD, T4	
EN 60079-15	I M2 / II 3 GD Ex nA nL IIC T4	
	BR-Ex nA II T4	
Marine applications	see "Approvals Overview" in section 1	

System Data	
No. of controllers connected to Master	64 with scanner
Max. no. of I/O points	ca. 6000 (depends on master)
Transmission medium	Shielded Cu cable
	Trunk line: 2 x 0.82mm <sup>2</sup> + 2 x 1.7 mm <sup>2</sup>
	Drop line: 2 x 0.2mm <sup>2</sup> + 2 x 0.32 mm <sup>2</sup>
Max. length of bus line	100 m ... 500 m (depends on baud rate/cable)
Baud rate	125 Kbaud, 250 Kbaud, 500 Kbaud
Buscoupler connection	5-pole male connector, Series 231 (MCS), female connector 231-305/ 010-000/ 050-000 (included)
Programming	WAGO-I/O-PRO 32 (as of firmware SW 08 also programmable with WAGO-I/O-PRO CAA)
IEC 61131-3	IL, LD, FBD, ST, FC



Technical Data	
Number of I/O modules	64
Fieldbus	
Max. input process image	1024 bytes
Max. output process image	1024 bytes
Max. input variables	512 bytes
Max. output variables	512 bytes
Configuration	via PC or PLC
Program memory	128 Kbytes
Data memory	64 Kbytes
Non-volatile memory (retain)	8 Kbytes
Cycle time	< 3 ms for 1,000 statements / 256 dig. I/Os
DeviceNet features	Polled I/O message connection Strobed I/O message connection Change of state Cyclic message connection UCMM DeviceNet master can be programmed using function blocks
Voltage supply	DC 24 V (-25 % ... +30 %)
Current consumption	
via power supply terminal	< 500 mA / 24 V
via DeviceNet interface	< 120 mA / 11 V
Efficiency of the power supply	87 %
Internal current consumption (5 V)	350 mA
Total current for I/O modules (5 V)	1650 mA
Isolation	500 V system/supply
Voltage via power jumper contacts	DC 24 V (-25 % ... +30 %)
Current via power jumper contacts (max.)	DC 10 A

General Specifications	
Operating temperature	0 °C ... +55 °C
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> / AWG 28 ... 14
Stripped lengths	8 ... 9 mm / 0.33 in
Dimensions (mm) W x H x L	51 x 65 x 100
	Height from upper-edge of DIN 35 rail
Weight	200 g
Storage temperature	-25 °C ... +85 °C
Relative air humidity (no condensation)	95 %
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	acc. to IEC 60068-2-27
Degree of protection	IP20
EMC CE-Immunity to interference	acc. to EN 50082-2 (1996)
EMC CE-Emission of interference	acc. to EN 50081-1 (1993)
EMC marine applications -	
Immunity to interference	acc. to Germanischer Lloyd (2003)
EMC marine applications -	
Emission of interference	acc. to Germanischer Lloyd (2003)