

# CANopen Programmable Fieldbus Controller D-Sub

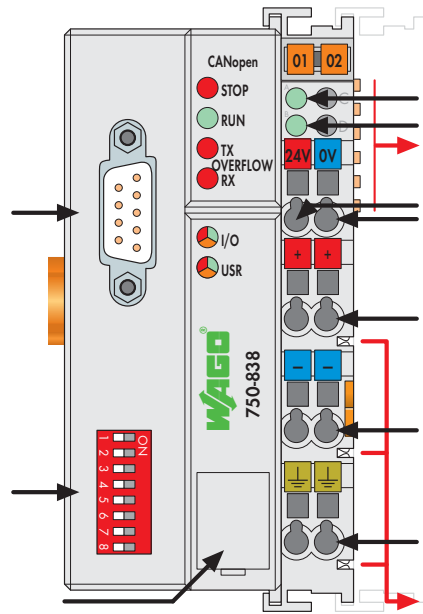
10 Kbaud ... 1 Mbaud; digital and analog signals



Fieldbus connection D-Sub

DIP switch for node 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 CANopen combines the functionality of the CANopen fieldbus coupler with the functionality of a Programmable Logic Controller (PLC).

Programming of the application is performed in accordance with IEC 61131-3, covering all 5 programming languages. The programmer can access all fieldbus and I/O data.

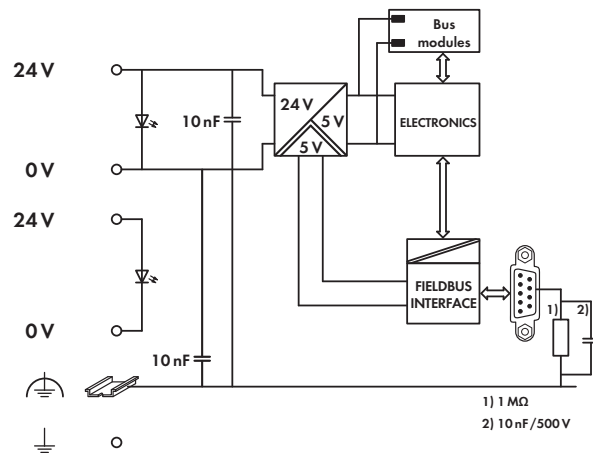
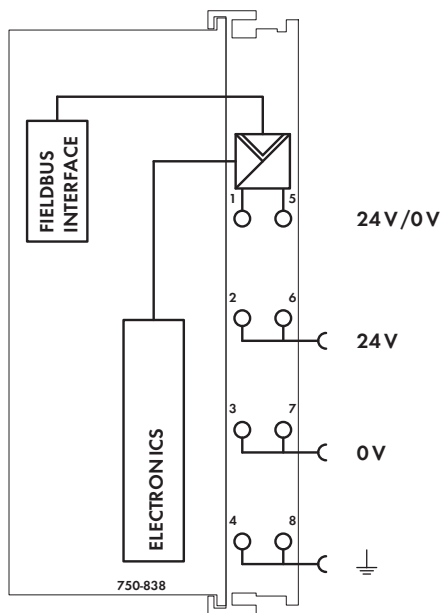
Characteristics and use:

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

Notice: EDS files required

Description	Item no.	Pack. unit
Contr. CANopen D-Sub	750-838	1
Contr. CANopen D-Sub	750-838/020-000	1
Program memory 256 kbytes; Data memory 192 kbytes		
Contr. CANopen D-Sub	750-838/021-000	1
Program memory 640 kbytes; Data memory 832 kbytes		
<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		
EN 60079-15	I M2 / II 3 GD Ex nA nL IIC T4	

System Data	
No. of controllers connected to Master	110
Transmission medium	Shielded Cu cable 3 x 0.25 mm <sup>2</sup>
Max. length of bus line	30 m ... 1000 m (depends on baud rate/cable)
Baud rate	10 Kbaud ... 1 Mbaud
Buscoupler connection	1 x D-Sub 9; plug
Programming	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	512 bytes
Max. output process image	512 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
No. of PDOs	32 Tx / 32 Rx
No. of SDOs	2 server SDOs / 16 client SDOs
Communication profile	DS-301 V4.01
Device profile	DS-401 V 2.0
	Marginal check
	Edge-triggered PDOs
	Programmable error response
	DSP 405
	NMT master can be programmed using function blocks
COB ID distribution	SDO, standard
Node ID distribution	DIP switches
Other CANopen features	NMT slave
	Minimum boot-up
	Variables PDO mapping
	Emergency message
	Life guarding / heartbeat
	Configuration of virtual modules
Voltage supply	DC 24 V (-15 % ... +20 %)
Max. input current (24 V)	500 mA
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 (-15 % ... +20 %)
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 mm² ... 2.5 mm² / 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 61000-6-2 (2001)
EMC CE-Emission of interference	acc. to EN 61000-6-3 (2001)