

The DeviceNet Controller combines control functionality, I/O interface and fieldbus in one device.

Application programming is IEC 61131-3 compliant.

The programmer can access all fieldbus and I/O data.

Features and applications:

- Decentralized control to optimize support for a PLC or PC
- Devide complex applications into individually testable units
- Programmable fault response in the event of fieldbus failure
- Signal pre-processing to reduce fieldbus transmissions
- Directly control peripheral equipment for faster system response times
- Stand-alone, compact controller

**Notes**

Note **Note: Configuration files required (EDS)!**  
The EDS files can be downloaded for free at [www.wago.com](http://www.wago.com).

Technical data	
Communication	DeviceNet
Visualization	none
CPU	16 bits
Programming languages per IEC 61131-3	Instruction List (IL) Ladder Diagram (LD) Function Block Diagram (FBD), Continuous Function Chart (CFC) Structured Text (ST) Sequential Function Chart (SFC)
Programming environment	WAGO-I/O-PRO V2.3 (based on CODESYS V2.3)
Configuration options	EDS device description file WAGO-I/O-CHECK
Cycle time	
Baud rate	500 kBd (125 kBd, 250 kBd, 500 kBd)
Bus segment length (max.)	500 m
Transmission medium (communication/fieldbus)	Shielded Cu cable; Remote bus cable: 2 x 0.82 mm <sup>2</sup> + 2 x 1.7 mm <sup>2</sup> ; Drop cable: 2 x 0.2 mm <sup>2</sup> + 2 x 0.32 mm <sup>2</sup>
Number of fieldbus nodes on master (max.)	64
Number of I/O points	6000
Program memory	128 KB
Data memory	64 KB
Non-volatile software memory	8 KB
Memory for fieldbus input variables (max.)	512 bytes
Memory for fieldbus output variables (max.)	512 bytes
Number of modules per node (max.)	64
Input and output process image (fieldbus) max.	1024 bytes/1024 bytes
DeviceNet features	Polled I/O Message Connection Strobed I/O Message Connection Change of State Cyclic Message Connection UCMM using function blocks DeviceNet master can be programmed
Indicators	LED (OVERF) red: device error; LED (RUN) green: Device status; LED (BUS OFF) red: Network error ; LED (CONNECT) green: Network status; LED (I/O, USR) red/green/orange: Local data bus status, status programmable by user; LED (A, B) green: System power supply status, field supply
Supply voltage (system)	24 VDC (-25 ... +30 %); via pluggable connector (CAGE CLAMP <sup>®</sup> connection)
Input current via DeviceNet interface at 11 V	120 mA
Input current (typ.) at nominal load (24 V)	500 mA
Power supply efficiency (typ.) at nominal load (24 V)	87 %
Current consumption (5 V system supply)	350 mA
Total current (system supply)	1650 mA
Supply voltage (field)	24 VDC (-25 ... +30 %); via power jumper contacts
Current carrying capacity (power jumper contacts)	10 A
Number of outgoing power jumper contacts	3
Isolation	500 V system/field

Connection data	
Connection technology: communication/fieldbus	DeviceNet: 1 x Male connector; 5-pole
Connection technology: system supply	2 x CAGE CLAMP <sup>®</sup>
Connection technology: field supply	6 x CAGE CLAMP <sup>®</sup>
Connection type 1	System/field supply
Solid conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 14 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches
Connection technology: device configuration	1 x Male connector; 4-pole

### Physical data

Width	50.5 mm / 1.988 inches
Height	100 mm / 3.937 inches
Depth	71.1 mm / 2.799 inches
Depth from upper-edge of DIN-rail	63.9 mm / 2.516 inches

### Mechanical data

Weight	200 g
Color	light gray
Housing material	Polycarbonate; polyamide 6.6
Conformity marking	CE

### Environmental requirements

Ambient temperature (operation)	0 ... +55 °C
Surrounding air temperature (storage)	-25 ... +85 °C
Protection type	IP20
Pollution degree (5)	2 per IEC 61131-2
Operating altitude	without temperature derating: 0 ... 2000 m; with temperature derating: 2000 ... 5000 m (0.5 K/100 m); 5000 m (max.)
Relative humidity (without condensation)	95 %
Mounting position	any
Mounting type	DIN-35 rail
Vibration resistance	4g per IEC 60068-2-6
Shock resistance	15g per IEC 60068-2-27
EMC immunity to interference	per EN 61000-6-2, marine applications
EMC emission of interference	per EN 61000-6-4, marine applications
Exposure to pollutants	per IEC 60068-2-42 and IEC 60068-2-43
Fire load	2.797 MJ
Permissible H <sub>2</sub> S contaminant concentration at a relative humidity 75 %	10 ppm
Permissible SO <sub>2</sub> contaminant concentration at a relative humidity 75 %	25 ppm

### Commercial data

Product Group	15 (Remote I/O)
eCl@ss 10.0	27-24-26-07
eCl@ss 9.0	27-24-26-07
ETIM 8.0	EC000236
ETIM 7.0	EC000236
PU (SPU)	1 Stück
Packaging type	Box
Country of origin VKOrg Germany	DE
GTIN	4045454527020
Customs tariff number VKOrg Germany	85371091990

## Approvals and certificates

## Ex-Approvals



Approval	Standard	Certificate name
ATEX TUEV Nord Cert GmbH	EN 60079-0	
CCCEX CQST/CNEx	CNCA-C23-01	2020312310000215 (Ex nA IIC T4 Gc)
EAC Brjansker Zertifizierungsstelle	TP TC 012/2011	EAC RU C-DE.AM02. B.00163/19 (2Ex nA IIC T4 Gc X)
IECEX TUEV Nord Cert GmbH	IEC 60079-0	IECEX_TUN_14.0035_X (Ex ec IIC T4 Gc)
INMETRO TÜV Rheinland do Brasil Ltda.	IEC 60079-0	BR-Ex_TÜV 12.1297 X
KTL Korea Testing Laboratory	KOSHA Article 34, IEC60079-0	20-KA4BO-0095X

## Country specific Approvals



Approval	Standard	Certificate name
EAC Brjansker Zertifizierungsstelle	TP TC 020/2011	EAC RU C-DE.AM02. B.00087/19
KC National Radio Research Agency	Article 58-2, Clause 3	MSIP-REM-W43-PFC750

## Ship Approvals



Approval	Standard	Certificate name
ABS American Bureau of Shipping	-	22-2219060
BSH Bundesamt fuer Seeschifffahrt und Hydrographie	-	1104
BV Bureau Veritas S.A.	-	13453/E0 BV
DNV DNV Germany GmbH	DNV-CG-0339, Aug.2021	TAA0000194
KR Korean Register of Shipping	-	KR HMB05880-AC001
LR Lloyds Register EMEA	-	LR22180952TA
PRS Polski Rejestr Statków	-	TE/2236/880590/19
RINA RINA Germany GmbH	-	ELE343521XG001

## UL-Approvals



Approval	Standard	Certificate name
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.1

## Downloads

## Environmental Product Compliance

## Compliance Search

Environmental Product  
Compliance 750-806



## Documentation

## Manual

System Manual WAGO I/O System 750 / 753 V 3.1.0 11.05.2022 pdf 8495.90 KB



System Manual Series  
750/753



DeviceNet Programmable Fieldbus Controller V 2.0.0 pdf 5755.55 KB



## System Description

Overview on WAGO-I/O-SYSTEM 750 approvals pdf 770.48 KB



750 Controller, General Product Information pdf 507.50 KB



Use in Hazardous Environments V 1.0.0 pdf 1007.06 KB



## Additional Information

Disposal; Electrical and electronic equipment, Packaging V 1.0.0 pdf 259.56 KB



## Bid Text

750-806 19.02.2019 xml 7.00 KB



750-806 22.07.2015 doc 33.00 KB



## CAD/CAE-Data

## CAD data

2D/3D Models 750-806



## CAE data

EPLAN Data Portal 750-806



WSCAD Universe 750-806



ZUKEN Portal 750-806



## Engineering-Software

## Configuration and Commissioning Software

WAGO-IO-PRO Demo-Version (759-912) / Serie 750, 758 und 762 V 2.3.9.68 17.02.2022 zip 122377.05 KB



## Runtime Software


## Firmware

0750-0806, Controller DeviceNet V 11 19.10.2021 zip 546.08 KB




## Device Files

### Device Driver

WAGO USB Service Kabel Treiber / Serie 750 und 857	6.5.3.0 10.09.2014	zip 4721.96 KB	
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## Libraries

### Device Description File

750-912; EDS-Dateien für DeviceNet / Serie 750, 752, 755 und 767	10 25.03.2011	zip 66.70 KB	
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