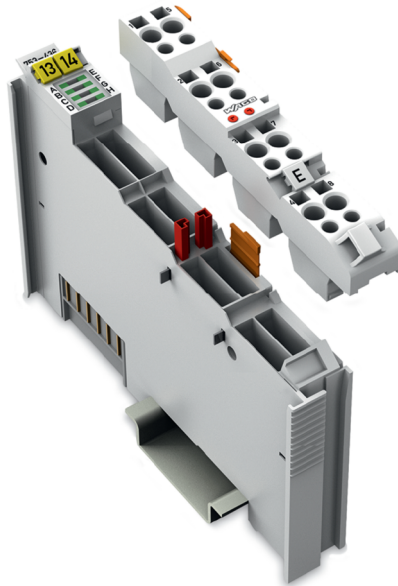


WAGO I/O System 750/753

8-channel digital input; 24 VDC; 3 ms; Low-side switching

753-436



© 2026 WAGO GmbH & Co. KG
All rights reserved.

WAGO GmbH & Co. KG

Hansastraße 27

D - 32423 Minden

Phone: +49 571/887 – 0

E-Mail: ✉ info@wago.comInternet: 🌐 www.wago.com**Technical Support**

Phone: +49 571/887 – 44555

E-Mail: ✉ support@wago.comInternet: 🌐 www.wago.com/support

Every conceivable measure has been taken to ensure the accuracy and completeness of this documentation. However, as errors can never be fully excluded, we always appreciate any information or suggestions for improving the documentation.

E-Mail: ✉ documentation@wago.com

We wish to point out that the software and hardware terms as well as the trademarks of companies used and/or mentioned in the present documentation are generally protected by trademark or patent.

WAGO is a registered trademark of WAGO Verwaltungsgesellschaft mbH.

Table of Contents

- 1 Provisions..... 4**
 - 1.1 Scope of Applicability 4
- 2 Overview..... 5**
- 3 Properties..... 6**
 - 3.1 View..... 6
 - 3.2 Indicators..... 7
 - 3.3 Wiring Interface..... 8
 - 3.4 Power Jumper Contacts 9
 - 3.5 Circuit Diagram 10
- 4 Functions 11**
 - 4.1 Signal Processing..... 11
 - 4.2 Process Image 11
- 5 Planning 12**
 - 5.1 Compatibility..... 12
 - 5.2 Requirements for Wiring and Accessories 12
 - 5.3 Connection Example 12
- 6 Appendix 13**
 - 6.1 Technical Data, Approvals, Guidelines and Standards..... 13
 - 6.1.1 Datenblatt 753-436 14

1 Provisions

1.1 Scope of Applicability

This document applies to the following product:

🔗 **753-436** (8DI 24V DC 3.0ms/ LSS) 8-channel digital input; 24 VDC; 3 ms;
Low-side switching.

From hardware version	01
From firmware version	--
Product detail page	🔗 www.wago.com/753-436

Note

Note applicable documents!

The complete operating instructions for the product consists of several, applicable documents. The product must only be installed and operated in accordance with the complete operating instructions. Knowledge of all applicable documents is required for proper use. You can find all documents and information on the product detail page.

Applicable document

📖 System Manual I/O System 750/753

- Provisions
- Safety
- Planning
- Transport and Storage
- Assembly and Disassembly
- Conductor Termination
- Decommissioning

2 Overview

The I/O module acquires binary control signals from field devices (e.g., sensors, encoders, switches or proximity switches).

The I/O module has eight input channels and directly connects to 1-wire sensors.

Each input channel has a noise-rejection RC filter with a 3.0 ms time constant.

The I/O module inputs provide low-side switching.

If the 0 V potential for field power is switched to an input connection, the signal status for the corresponding input channel is set to "high."

For each channel, a green status LED indicates the signal status.

The field level and the system level are electrically isolated from one another.

The I/O module can be operated on all head stations of the WAGO I/O System 750/753.

3 Properties

3.1 View

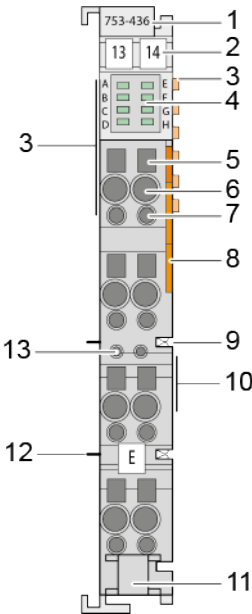


Figure 1: View¹⁾

1	Item number	Provisions [> 4]
2	Slot for Mini-WSB (optional)	System Manual I/O System 750/753
3	Data contacts	System Manual I/O System 750/753
4	Indicators	Indicators [> 7]
5	Access to open the associated CAGE CLAMP® connection	System Manual I/O System 750/753
6	CAGE CLAMP® connection	Wiring Interface [> 8] and System Manual I/O System 750/753
7	Test slot for associated CAGE CLAMP® connection	System Manual I/O System 750/753
8	Release tab for the plug ¹⁾	System Manual I/O System 750/753
9	Power jumper contacts (spring)	Power Jumper Contacts [> 9] and System Manual I/O System 750/753
10	Release tab for the I/O module	System Manual I/O System 750/753
11	Fastening tab for cable ties	System Manual I/O System 750/753
12	Power jumper contacts (blade)	Power Jumper Contacts [> 9] and System Manual I/O System 750/753
13	Coding option via coding keys ¹⁾	System Manual I/O System 750/753

¹⁾ Illustration of the I/O module, incl. plug (Item No.: [753-110](#)). 753 Series pluggable connectors and coding keys (Item No.: [753-150](#)) are not included.

3.2 Indicators

For each channel, a green status LED indicates the signal status.

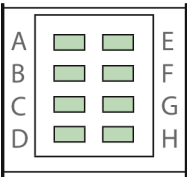


Figure 2: Indicators

Channel	Designation	LED	State	Function
1	DI 1 status	A	Off	DI 1 input: signal voltage (0)
			Green	DI 1 input: signal voltage (1)
2	DI 2 status	E	Off	DI 2 input: signal voltage (0)
			Green	DI 2 input: signal voltage (1)
3	DI 3 status	B	Off	DI 3 input: signal voltage (0)
			Green	DI 3 input: signal voltage (1)
4	DI 4 status	F	Off	DI 4 input: signal voltage (0)
			Green	DI 4 input: signal voltage (1)
5	DI 5 status	C	Off	DI 5 input: signal voltage (0)
			Green	DI 5 input: signal voltage (1)
6	DI 6 status	G	Off	DI 6 input: signal voltage (0)
			Green	DI 6 input: signal voltage (1)
7	DI 7 status	D	Off	DI 7 input: signal voltage (0)
			Green	DI 7 input: signal voltage (1)
8	DI 8 status	H	Off	DI 8 input: signal voltage (0)
			Green	DI 8 input: signal voltage (1)

3.3 Wiring Interface

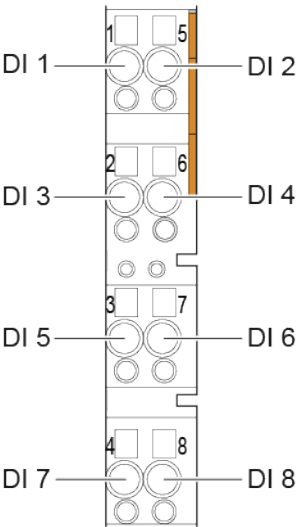


Figure 3: CAGE CLAMP® Connections¹⁾

Channel	Name	Connection	Function
1	DI 1	1	Input DI 1: signal voltage
2	DI 2	5	Input DI 2: signal voltage
3	DI 3	2	Input DI 3: signal voltage
4	DI 4	6	Input DI 4: signal voltage
5	DI 5	3	Input DI 5: signal voltage
6	DI 6	7	Input DI 6: signal voltage
7	DI 7	4	Input DI 7: signal voltage
8	DI 8	8	Input DI 8: signal voltage

¹⁾ Illustration of the I/O module, including plug (Item No.: [753-110](#), not included)

3.4 Power Jumper Contacts

The potential for the field supply is fed in via the blade contacts and passed on via the spring contacts.

For additional information on the Power Jumper Contacts, please see [System Manual I/O System 750/753](#).

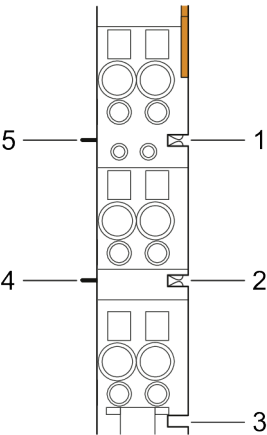


Figure 4: Power Jumper Contacts^{*)}

No.	Type
1	Groove with spring contact
2	
3	Groove without contact
4	Blade contact
5	

^{*)} Illustration of the I/O module, including plug (item no.: [753-110](#), not included)

Arrangement in the Bus Node

For mechanical arrangement of the I/O module, the previous component must have at least 2 open grooves for accommodating the blade contacts.

For electrical compatibility requirements see Section [Circuit Diagram](#) [\[> 10\]](#).

3.5 Circuit Diagram

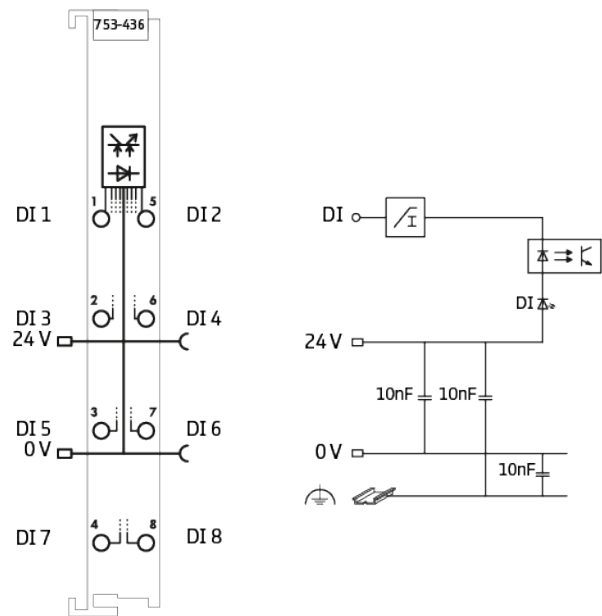


Figure 5: Circuit Diagram

For information on the system power supply, please see [System Manual I/O System 750/753](#).

4 Functions

4.1 Signal Processing

Each input channel has a noise-rejection RC filter with a 3.0 ms time constant.

The I/O module inputs provide low-side switching.

If the 0 V potential for field power is switched to an input connection, the signal status for the corresponding input channel is set to "high."

4.2 Process Image

Table 1: Process Image – Input

Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
DI 8	DI 7	DI 6	DI 5	DI 4	DI 3	DI 2	DI 1
DI 1		DI 1 signal status – digital input channel 1					
DI 2		DI 2 signal status – digital input channel 2					
DI 3		DI 3 signal status – digital input channel 3					
DI 4		DI 4 signal status – digital input channel 4					
DI 5		DI 5 signal status – digital input channel 5					
DI 6		DI 6 signal status – digital input channel 6					
DI 7		DI 7 signal status – digital input channel 7					
DI 8		DI 8 signal status – digital input channel 8					

5 Planning

This section provides helpful information for planning the use of the product in a node.

5.1 Compatibility

The I/O module can be operated on all head stations of the WAGO I/O System 750/753.

5.2 Requirements for Wiring and Accessories

If applicable, use appropriate potential multiplication modules (e.g., Item No.: [753-614](#)) for the power supply to the sensors.

753 Series Pluggable Connector

You need a plug (item no.: [753-110](#)), which is not included with the I/O module.

5.3 Connection Example

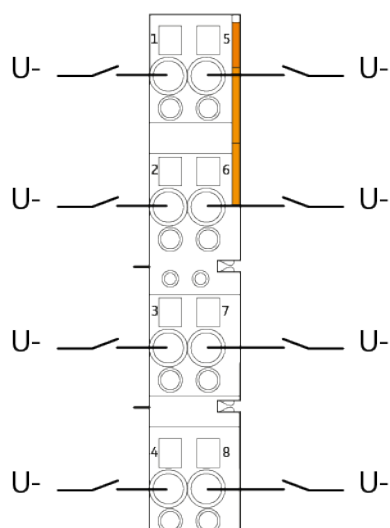


Figure 6: Example: 1-Wire Connection

6 Appendix

6.1 Technical Data, Approvals, Guidelines and Standards

Note

Subject to changes!

Please also observe the further product documentation! You can generate the current datasheet at any time at: [> www.wago.com](https://www.wago.com) /<item number>.

See also

 Datenblatt 753-436 [► 14]

Data Sheet | Item Number: 753-436

8-channel digital input; 24 VDC; 3 ms; Low-side switching

<https://www.wago.com/753-436>



Notes

Note	Pluggable connectors and coding fingers (753 Series) are not included.
------	--

Technical data

Number of digital inputs	8
Total number of channels (module)	8
Signal type	Digital
Signal type (voltage)	24 VDC
Sensor connection	8 x (1-wire)
Input characteristic	low-side switching
Input filter	3 ms
Input current per channel for signal (0) typ.	2.8 mA
Voltage range for signal (0)	15 ... 30 VDC
Voltage range for signal (1)	-3 ... +5 VDC
Input data width (internal) max.	8 bits
Supply voltage (system)	5 VDC; via data contacts
Current consumption (system supply)	13 mA
Supply voltage (field)	24 VDC (-25 ... +30 %); via power jumper contacts (power supply via blade contact; transmission (field side supply voltage only) via spring contact)
Isolation	500 V system/field
Indicators	LED (A-D) green: Status DI 1, DI 3, DI 5, DI 7; LED (E-H) green: Status DI 2, DI 4, DI 6, DI 8
Number of incoming power jumper contacts	2
Number of outgoing power jumper contacts	2
Current carrying capacity (power jumper contacts)	10 A

Connection Data

Connection technology: I/O	8 x CAGE CLAMP® (inputs)
Connectable conductor materials	Copper
Connection type	Input
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Strip length	9 ... 10 mm / 0.35 ... 0.39 inches

Physical data

Width	12 mm / 0.472 inches
Height	100 mm / 3.937 inches
Depth	69 mm / 2.717 inches
Depth from upper-edge of DIN-rail	61.8 mm / 2.433 inches



Mechanical data	
Mounting type	DIN-35 rail
Pluggable connector	pluggable

Material data	
Housing material	Polycarbonate; polyamide 6.6
Fire load	0.977 MJ
Weight	39.7 g
Conformity marking	CE

Environmental requirements	
Ambient temperature (operation)	0 ... +55 °C
Ambient temperature (storage)	-40 ... +85 °C
Protection type	IP20
Pollution degree	2 per IEC 61131-2
Operating altitude	0 ... 2000 m / 0 ... 6562 ft
Mounting position	Horizontal left, horizontal right, horizontal top, horizontal bottom, vertical top and vertical bottom
Relative humidity (without condensation)	95 %
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 61000-6-3, marine applications
Exposure to pollutants	per IEC 60068-2-42 and IEC 60068-2-43
Permissible H ₂ S contaminant concentration at a relative humidity 75 %	10 ppm
Permissible SO ₂ contaminant concentration at a relative humidity 75 %	25 ppm

Product Classification	
UNSPSC	32151705
eCl@ss 10.0	27-24-26-04
eCl@ss 9.0	27-24-26-04
ETIM 9.0	EC001599
ETIM 10.0	EC001599
ECCN	NO US CLASSIFICATION

Environmental Product Compliance	
CAS-No.	1303-86-2 1317-36-8 7439-92-1
REACH Candidate List Substance	Diboron trioxide Lead Lead monoxide
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	6(c) 7(a) 7(c)-I 7(c)-II
SCIP notification number (Austria)	6298f40d-2492-4805-a35e-e85eaa5afc1d
SCIP notification number (Belgium)	cf1d4913-9cfc-424f-80ee-cdaf270b881b
SCIP notification number (Bulgaria)	e7cd76af-c3d7-4588-b0b4-2165e6d081b6
SCIP notification number (Czech Republic)	f15d44fe-8e14-47ed-a009-21de701d2c9a
SCIP notification number (Denmark)	371473df-0618-4911-8be0-823edcf44240
SCIP notification number (Finland)	a305fde8-b59a-4b3e-af46-5baafb06c3c6
SCIP notification number (France)	160a4901-8422-45ff-a723-57e9d9473c68
SCIP notification number (Germany)	9c0dfe80-febe-446e-8f80-2a76f53725aa
SCIP notification number (Hungary)	5a9967b7-0f8f-4b9c-b86d-2eb1e824afcc



Environmental Product Compliance

SCIP notification number (Italy)	dfd3e0d6-cf8c-4aa9-ba51-b09c16cd55bf
SCIP notification number (Netherlands)	f461cefb-ac8f-4bfb-8449-a12d025c18cb
SCIP notification number (Poland)	dbda538d-d01c-4656-a709-4cff020cc779
SCIP notification number (Romania)	af99905a-a6dc-48eb-9fd6-d8a53013ccfc
SCIP notification number (Sweden)	5ed542ed-0635-46a7-84bb-f1c066ee1b63

Approvals / Certificates

General approvals

  		
Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03083
KC National Radio Research Agency	Article 58-2, Clause 3	MSIP-REM-W43-DIM750
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 508	E175199

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications

     		
Approval	Standard	Certificate Name
ABS American Bureau of Shipping	-	25-0415412
BSH Bundesamt fuer Seeschifffahrt und Hydrographie	-	1104
BV Bureau Veritas S.A.	-	13453/E0 BV
DNV DNV GL SE	DNV-CG-0339, Aug. 2021	TAA0000194
KR Korean Register of Shipping	-	KR HMB05880-AC001
LR Lloyds Register EMEA	-	LR22180952TA
PRS Polski Rejestr Statków	-	TE/1101/880590/23
RINA RINA Germany GmbH	-	ELE343521XG001

Approvals for hazardous areas

     		
Approval	Standard	Certificate Name
ATEX TUEV Nord Cert GmbH	EN 60079-0	TUEV14ATEX148929X (II 3 G Ex ec IIC T4 Gc)
CCCEX CQST/CNEC	CNCA-C23-01	2020312310000213 (Ex ec IIC T4 Gc)
IECEx TUEV Nord Cert GmbH	IEC 60079-0	IECEx TUN 14.0035 X (Ex ec IIC T4 Gc)
INMETRO TUV Rheinland do Brasil Ltda.	IEC 60079-0	TUV 12.1297 X
UKEx WAGO GmbH & Co. KG	EN 60079-0	UKCA_WA GO22UKEX003X_ec
UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726



1 Compatible Products
1.1 Required Accessories
1.1.1 Pluggable connector
1.1.1.1 Male connector/plug



Item No.: [753-110](#)
Plug

List of Tables

Table 1	Process Image – Input.....	11
---------	----------------------------	----

List of Figures

Figure 1	View*)	6
Figure 2	Indicators.....	7
Figure 3	CAGE CLAMP® Connections*)	8
Figure 4	Power Jumper Contacts*)	9
Figure 5	Circuit Diagram	10
Figure 6	Example: 1-Wire Connection.....	12

WAGO GmbH & Co. KG

Postfach 2880 · D - 32385 Minden
Hansastraße 27 · D - 32423 Minden

✉ info@wago.com
🌐 www.wago.com

Headquarters
Sales
Order Service

+49 571/887 – 0
+49 (0) 571/887 – 44 222
+49 (0) 571/887 – 44 333

WAGO is a registered trademark of WAGO Verwaltungsgesellschaft mbH.

Copyright – WAGO GmbH & Co. KG – All rights reserved. The content and structure of the WAGO websites, catalogs, videos and other WAGO media are subject to copyright. Distribution or modification of the contents of these pages and videos is prohibited. Furthermore, the content may neither be copied nor made available to third parties for commercial purposes. Also subject to copyright are the images and videos that were made available to WAGO GmbH & Co. KG by third parties.