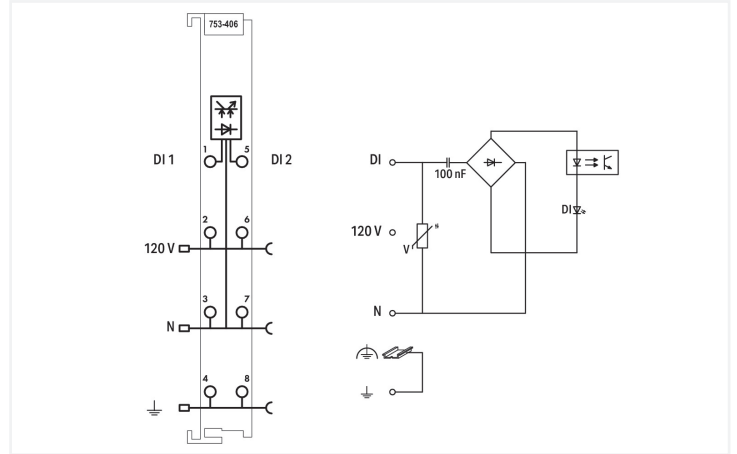
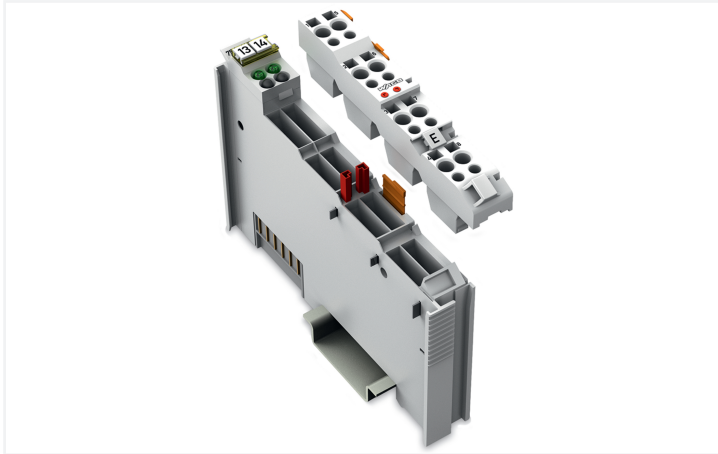


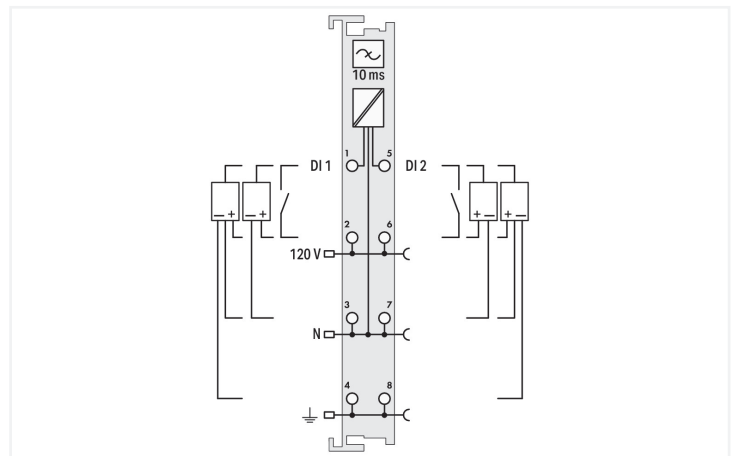
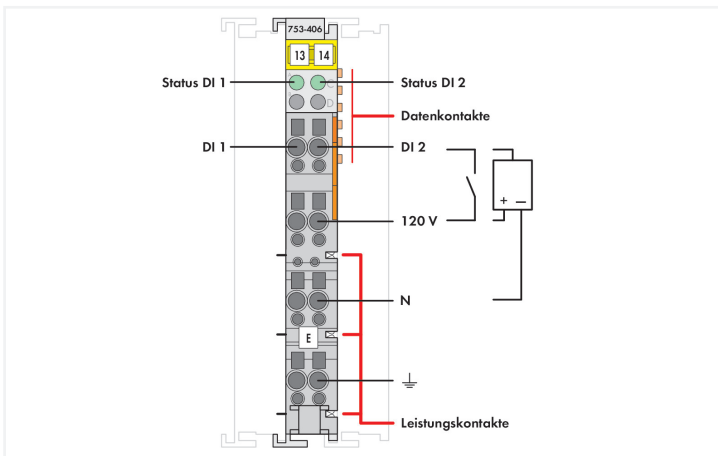
# Data Sheet | Item Number: 753-406

2-channel digital input; 120 VAC

<https://www.wago.com/753-406>



Color: ■ light gray



This digital input module receives control signals from field devices (e.g., sensors).

Field and system levels are electrically isolated. **Notice:**

An additional supply module must be added for 120 VAC supply!

## Notes

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

## Technical data

Number of digital inputs	2
Total number of channels (module)	2
Signal type	Digital
Signal type (voltage)	120 VAC
Sensor connection	2 x (2-wire, 3-wire, 4-wire)
Input characteristic	high-side switching
Input filter	10 ms
Input current per channel for signal (1) typ.	4.5 mA
Voltage range for signal (0)	0 ... 20 VAC
Voltage range for signal (1)	79 VAC ... 1.1 x U <sub>N</sub>
Signal frequency (min.)	45 Hz

### Technical data

Signal frequency (max.)	65 Hz
Sensor supply	120 VAC
Input data width (internal) max.	2 bits
Supply voltage (system)	5 VDC; via data contacts
Current consumption (system supply)	2 mA
Supply voltage (field)	120 VAC (-15 ... +20 %); via power jumper contacts (power supply via blade contact; transmission (field side supply voltage only) via spring contact)
Isolation	1500 V (system/field)
Indicators	LED (A, C) green: Status DI 1, DI 2
Number of incoming power jumper contacts	3
Number of outgoing power jumper contacts	3
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 <sup>2</sup> / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm <sup>2</sup> / 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	69.8 mm / 2.748 inches
Depth from upper-edge of DIN-rail	62.6 mm / 2.465 inches

### Mechanical data

Mounting type	DIN-35 rail
Pluggable connector	pluggable

### Material data

Color	light gray
Housing material	Polycarbonate; polyamide 6.6
Fire load	1.009 MJ
Weight	44 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 61000-6-4, marine applications
Exposure to pollutants	per IEC 60068-2-42 and IEC 60068-2-43

### Environmental requirements

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 (I/O System)
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4045454394394
Customs tariff number	85176200000

### 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.	12060-00-3 1303-86-2 1317-36-8 7439-92-1 79-94-7
REACH Candidate List Substance	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol Diboron trioxide Lead Lead monoxide Lead titanium oxide (PbTiO <sub>3</sub> )
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	6(c) 7(a) 7(c)-I 7(c)-II
SCIP notification number (Austria)	7a051487-67b1-4dbd-917c-5c91bf2facb3
SCIP notification number (Belgium)	27e49977-c51c-43d7-88d6-9954968f756d
SCIP notification number (Bulgaria)	e32a889b-6c32-411a-b179-aa2843c619fb
SCIP notification number (Czech Republic)	c2c3aa86-81cd-4bb7-ad74-d051b03cd10c
SCIP notification number (Denmark)	4a21a712-d423-4956-a4d7-3ab2b5c64a5f
SCIP notification number (Finland)	acb52e89-8a85-4f25-a8d9-e7bde0db34a2
SCIP notification number (France)	1b8cf983-253d-467a-b2cb-3bcb85aa3084
SCIP notification number (Germany)	91fdc641-5167-434b-a7b1-e521e9b0ec5a
SCIP notification number (Hungary)	216dace8-16a9-4a39-934d-b107a53da811
SCIP notification number (Italy)	5095668e-34d7-46d2-a8bd-fcc87db25d00
SCIP notification number (Netherlands)	e4dff3e2-f11f-4f99-971c-f0ffdc606448
SCIP notification number (Poland)	6c4cba0f-b213-4f42-a3a6-e41b96b540c6
SCIP notification number (Romania)	cfdf7ff4e-694b-436d-8352-b67719375c83
SCIP notification number (Sweden)	503317b4-6e0d-48f9-bd51-d8a93f1cb20a

Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03083
EAC GZO Almaty Standart	TP TC 004/2011	EAC CoC 03084
KC National Radio Research Agency	Article 58-2, Clause 3	MSIP-REM-W43-DIM750
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 508	E175199

Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Shipping	-	25-0415412
BSH Bundesamt fuer Seeschiff-fahrt 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/CNEx	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

**Downloads**

**Environmental Product Compliance**

Compliance Search	
Environmental Product Compliance 753-406	<a href="#">↓</a>

**Documentation**

Manual			
Product Manual 2-channel, 120VAC	V 1.2.0	pdf 3668.59 KB	<a href="#">↓</a>
System Manual Series 750/753			<a href="#">↓</a>

System Description		
750/753 Series I/O-System – General Product Information	pdf 953.35 KB	<a href="#">↓</a>
Overview on WAGO-I/O-SYSTEM 750 approvals	pdf 770.48 KB	<a href="#">↓</a>

Bid Text			
753-406	19.02.2019	xml 4.78 KB	<a href="#">↓</a>
753-406	13.07.2017	doc 29.00 KB	<a href="#">↓</a>

Instruction Leaflet			
CCC Ex (Additional information)	26.04.2023	pdf 159.76 KB	<a href="#">↓</a>

**CAD/CAE-Data**

CAD data	
2D/3D Models 753-406	<a href="#">↓</a>

CAE data	
EPLAN Data Portal 753-406	<a href="#">↓</a>
WSCAD Universe 753-406	<a href="#">↓</a>
ZUKEN Portal 753-406	<a href="#">↓</a>

**1 Compatible Products**

**1.1 Required Accessories**

**1.1.1 Pluggable connector**

**1.1.1.1 Male connector/plug**



**Item No.: 753-110**  
Plug

## 1.2 Optional Accessories

### 1.2.1 DIN-rail

#### 1.2.1.1 Mounting accessories



**Item No.: 210-196**

Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored



**Item No.: 210-198**

Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored



**Item No.: 210-197**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored



**Item No.: 210-114**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored



**Item No.: 210-118**

Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored



**Item No.: 210-115**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm; silver-colored



**Item No.: 210-112**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm; silver-colored



**Item No.: 210-113**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored

### 1.2.2 Marking

#### 1.2.2.1 Group marker carrier



**Item No.: 750-106**

Group marker carrier

#### 1.2.2.2 Marker



**Item No.: 750-100**

Marker card; as a DIN A4 sheet; plain



**Item No.: 2009-145/000-006**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue



**Item No.: 2009-145/000-007**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray



**Item No.: 2009-145/000-023**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green



**Item No.: 2009-145/000-012**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange



**Item No.: 2009-145/000-005**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red



**Item No.: 2009-145/000-024**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet



**Item No.: 2009-145**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white



**Item No.: 2009-145/000-002**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow



**Item No.: 248-501/000-006**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue



**Item No.: 248-501/000-007**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray



**Item No.: 248-501/000-023**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green



**Item No.: 248-501/000-017**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green



**Item No.: 248-501/000-012**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange



**Item No.: 248-501/000-005**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red



**Item No.: 248-501/000-024**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet



**Item No.: 248-501**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white



**Item No.: 248-501/000-002**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow

### 1.2.2.3 Marker carrier



**Item No.: 750-103**  
Group marker carrier

### 1.2.3 Pluggable connector

#### 1.2.3.1 Coding



**Item No.: 753-150**  
753 Series coding elements

### 1.2.4 Shield termination

#### 1.2.4.1 Shield clamping saddles



**Item No.: 790-108**  
Shield clamping saddle; 11 mm wide; diameter of compatible conductor; 3 ... 8 mm



**Item No.: 790-208**  
Shield clamping saddle; 12.4 mm wide; 3 ... 8 mm



**Item No.: 790-116**  
Shield clamping saddle; 19 mm wide; diameter of compatible conductor; 7 ... 16 mm



**Item No.: 790-216**  
Shield clamping saddle; 21.8 mm wide; 6 ... 16 mm



**Item No.: 790-124**  
Shield clamping saddle; 27 mm wide; diameter of compatible conductor; 6 ... 24 mm



**Item No.: 790-220**  
Shield clamping saddle; 30 mm wide; 6 ... 20 mm



**Item No.: 790-140**  
Shield clamping saddle; diameter of compatible conductor

### 1.2.5 Supply module

#### 1.2.5.1 Supply module



**Item No.: 750-612**  
Power Supply; 0 ... 230 V AC/DC



**Item No.: 753-612**  
Power Supply; 0 ... 230 V AC/DC



**Item No.: 750-615**  
Power Supply; 120 VAC; fuse holder

### 1.2.6 System enclosure

#### 1.2.6.1 System enclosure



**Item No.: 850-825**  
IP65 enclosure; Aluminium (RAL 7032); Wx-HxD (160x100x160 mm); 9 x M12, 4 x M20



**Item No.: 850-826**  
IP65 enclosure; Aluminium (RAL 7032); Wx-HxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip



**Item No.: 850-827**  
IP65 enclosure; Aluminium (RAL 7032); Wx-HxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip



**Item No.: 850-828**  
IP65 enclosure; Aluminium (RAL 7032); Wx-HxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip



**Item No.: 850-826/002-000**  
IP65 enclosure; Aluminium (RAL 7035); Wx-HxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip



**Item No.: 850-827/002-000**  
IP65 enclosure; Aluminium (RAL 7035); Wx-HxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip



**Item No.: 850-828/002-000**  
IP65 enclosure; Aluminium (RAL 7035); Wx-HxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip



**Item No.: 850-834**  
IP65 enclosure; Polyester (RAL 7032); Wx-HxD (164x100x164 mm); 9 x M12, 4 x M20



**Item No.: 850-835**  
IP65 enclosure; Polyester (RAL 7032); Wx-HxD (244x100x164 mm); 4 x M20, 4 x M16, 14 x M12 cable grip



**Item No.: 850-836**  
IP65 enclosure; Polyester (RAL 7032); Wx-HxD (324x100x164 mm); 4 x M20, 8 x M16, 17 x M12 cable grip



**Item No.: 850-814/002-000**  
IP65 enclosure; Sheet steel (RAL 7035); Wx-HxD (200x120x200 mm); without flange plate



**Item No.: 850-815/002-000**  
IP65 enclosure; Sheet steel (RAL 7035); Wx-HxD (300x120x200 mm); without flange plate

### 1.2.6.1 System enclosure



**Item No.: 850-816/002-000**

IP65 enclosure; Sheet steel (RAL 7035); Wx-HxD (400x120x200 mm); without flange plate

**Item No.: 850-817/002-000**

IP65 enclosure; Sheet steel (RAL 7035); Wx-HxD (600x120x200 mm); without flange plate