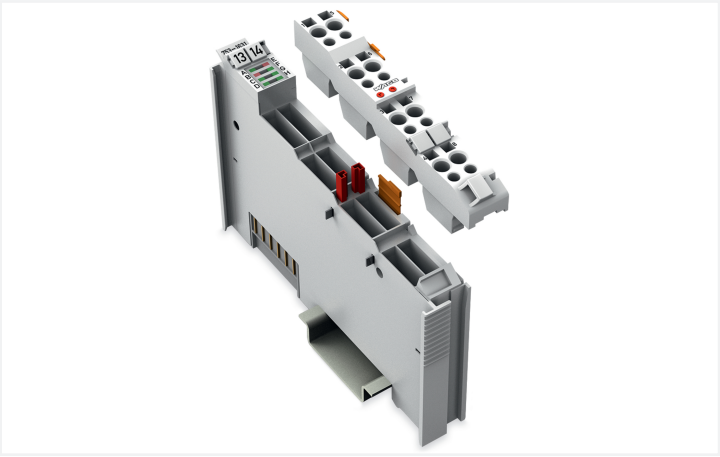
Data Sheet | Item Number: 753-1631

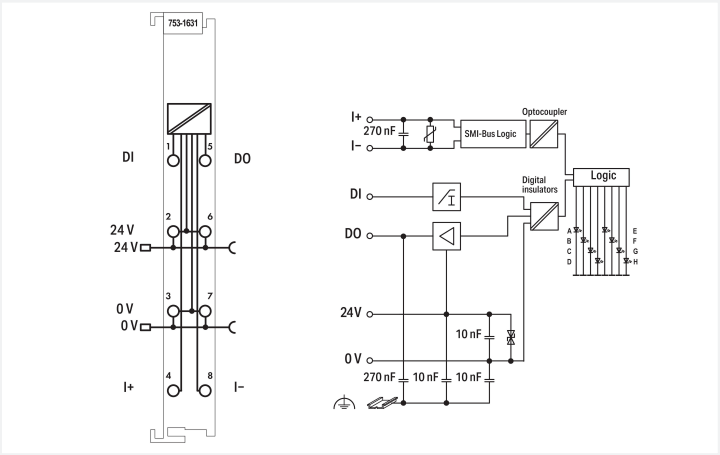
SMI Master LoVo; 24 VDC

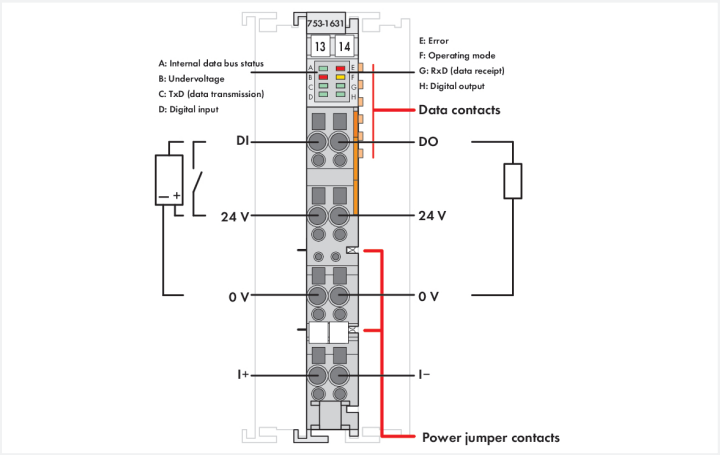
https://www.wago.com/753-1631

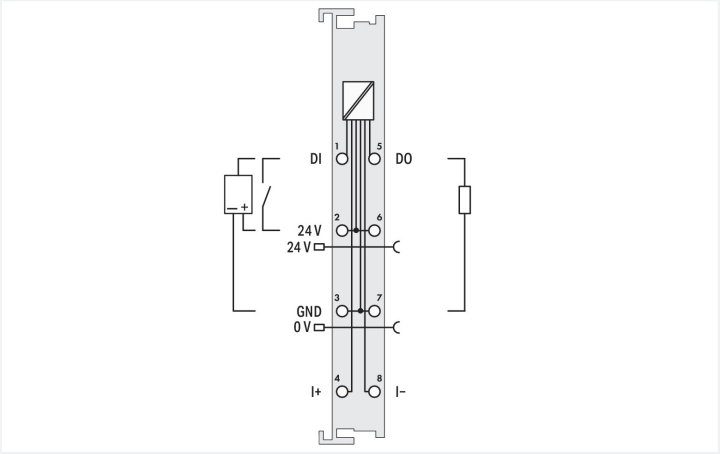




Color: light gray







The SMI Master is a standard interface to SMI-compliant electrical drives.
The SMI Master operates up to 16 SMI LoVo drives. Several SMI Masters may be operated within a node.
Communication between applications and SMI LoVo drives is performed via special IEC function blocks. These function blocks support both single and group addressing, as well as status monitoring.
The SMI function blocks can be used with the 750 Series Programmable Fieldbus Controllers.
Alternatively, the fieldbus coupler mode provides simple function calls for control without complex PLC programming.
The SMI configurator is suitable for addressing, configuring and commissioning SMI LoVo drives.

Additional functions: The programmed commands can be overwritten by an external sensor or switch via additional digital input.
The drive can be switched off by a relay via additional digital output to save energy. The drive is automatically switched on again by the output before the next drive command.

About SMI: SMI stands for Standard Motor Interface, a standard interface for electrical drives.
SMI was developed to connect drives with integrated electronic circuitry for applications in shutters and sunshade systems.

SMI is a protected word/image mark of the SMI Standard Motor Interface e.V. VR380 995 District Court Freiburg.

Technical data

Device specification	SMI Master Interface per “SMI Data Format and Framework Protocol” Specifications Rev. 3.0.2BF and “HMI Hardware Specification” Rev. 3.0
Number of digital inputs	1
Number of digital outputs	1
Number of SMI channels	1 (1 … 16 SMI LoVo slaves per channel)
Input characteristic	Type 1
Input voltage (max.)	31.2 VDC
Output current (per channel)	0.5 A; per digital output
Data width	12-byte data
Commissioning	via WAGO SMI Configurator or IEC libraries
Supply voltage (system)	5 VDC; via data contacts
Current consumption (system supply)	34 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)
Current consumption, field supply (module with no external load)	10 mA
Isolation	3 kVAC RMS, 4 kV surge (system/SMI); 1.5 kVAC RMS, 2.5 kV surge (system/field)
Indicators	LED (A, C, D, G, H) green: local bus status, TxD (data transmission), digital input, RxD (data reception), digital output; LED (B, E) red: undervoltage, error; LED (F) yellow: operating mode
Number of incoming power jumper contacts	2
Number of outgoing power jumper contacts	2

Connection Data

Connection technology: I/O	8 x CAGE CLAMP®
Connectable conductor materials	Copper
Connection type	Inputs/outputs
Solid conductor	0.08 … 2.5 mm² / 28 … 14 AWG
Fine-stranded conductor	0.08 … 2.5 mm² / 28 … 14 AWG
Strip length	8 … 9 mm / 0.31 … 0.35 inches
Connection requirement (permissible cable length)	350 m
Connection requirement (permissible cable type)	2-line, unshielded

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

Continued on next page

Mechanical data

Mounting type	DIN-35 rail
Pluggable connector	pluggable

Material data

Color	light gray
Housing material	Polycarbonate; polyamide 6.6
Fire load	0.934 MJ
Weight	53.9 g
Conformity marking	CE

Environmental requirements

Ambient temperature (operation)	0 … +50 °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	Per IEC 60068-2-6
Shock resistance	15g per IEC 60068-2-27
Exposure to pollutants	per IEC 60068-2-42 and IEC 60068-2-43
Permissible H_2S contaminant concentration at a relative humidity 75 %	10 ppm
Permissible SO_2 contaminant concentration at a relative humidity 75 %	25 ppm

Commercial data

PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4055143592307
Customs tariff number	85389099990

Product Classification

UNSPSC	32151705
eCl@ss 10.0	27-24-26-08
eCl@ss 9.0	27-24-26-08
ETIM 9.0	EC001604
ETIM 10.0	EC001604
ECCN	NO US CLASSIFICATION

Environmental Product Compliance

RoHS Compliance Status	Compliant,No Exemption
SCIP notification number (Austria)	960fa716-0662-4edc-a613-30a99ad29a5b
SCIP notification number (Belgium)	cbd816f9-095d-4915-b0a1-e3c5c7c691aa
SCIP notification number (Bulgaria)	a6729924-d605-4485-a7b6-c2a4cb20fb98
SCIP notification number (Czech Republic)	3cc98fc4-b2c1-4b0c-b2db-aba6d14d4ec7
SCIP notification number (Denmark)	e91aa4d4-d2b4-4334-a5bb-ea6f1b9e5e97
SCIP notification number (Finland)	88f822b7-49ad-4632-ae99-ebac97b58d1a
SCIP notification number (France)	4e5308ce-7760-4c67-81a7-bd8e9d751712
SCIP notification number (Germany)	f6fb02f9-8358-47a8-8851-4a2e1d134651
SCIP notification number (Hungary)	82d4ef30-ba2c-4da9-b1dc-4aaf823a170c

Continued on next page

Environmental Product Compliance

SCIP notification number (Italy)	00f58d32-02f0-4d94-94df-781567479028
SCIP notification number (Netherlands)	fea03748-98d0-4c50-ba31-411e627d660f
SCIP notification number (Poland)	6aef7cca-b263-4eb8-867f-39e0148b8323
SCIP notification number (Romania)	8c512ac3-6f09-4803-a330-93e1ed656e91
SCIP notification number (Sweden)	2887a4b5-6c19-47f8-81d4-7852a95980db

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-MCM750

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	-	-

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 753-1631

Documentation

Manual

Product Manual SMI Master Module; 24 VDC	2602622603 | 3 | en-US | 2025-10-23 13:09 28.10.2025	pdf 3549.33 KB	
Product Manual WAGO SMI Configurator	1.3.0 11.08.2023	pdf 2178.45 KB	
System Manual Series 750/753			

System Description

750/753 Series I/O-System – General Product Information	pdf 953.35 KB	
Overview on WAGO-I/O-SYSTEM 750 approvals	pdf 770.48 KB	

Bid Text

753-1631	19.02.2019	xml 6.24 KB	
753-1631	16.10.2017	doc 31.00 KB	
ausschreiben.de 753-1631			

Continued on next page

Application Notes

Application Note CoDeSys 2.3

Application note SMI_163x_01.lib	V1.0 28.07.2017	zip 1404.60 KB	

Application Note e!COCKPIT

eCOCKPIT Application Note WagoAppSMI	2023-01-10 17.01.2023	zip 3598.46 KB	

CAD/CAE-Data

CAD data

2D/3D Models 753-1631

CAE data

EPLAN Data Portal 753-1631

ZUKEN Portal 753-1631

Engineering-Software

Configuration and Commissioning Software

WAGO SMI Configurator	1.74.00.00 11.09.2019	exe 67636.10 KB	

Runtime Software

Firmware

0753-163x, SMI-Master	V 07 01.09.2023	zip 162.34 KB	

Libraries

e!COCKPIT libraries

e!COCKPIT Library Description WagoAppSMI	1.2.0.5 29.09.2023	pdf 1039.32 KB	

Library

Libraries for Building Automation CODESYS 2.3	2025-01-30 30.01.2025	zip 71441.83 KB	

1 Compatible Products

1.1 Optional Accessories

1.1.1 DIN-rail

1.1.1.1 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.: 210-112
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

Continued on next page

1.1.2 Marking

1.1.2.1 Group marker carrier



Item No.: 750-107
Group marker carrier

1.1.2.2 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

1.1.2.3 Marker carrier



Item No.: 750-103
Group marker carrier

1.1.3 Shield termination

1.1.3.1 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

Continued on next page

1.1.4 System enclosure

1.1.4.1 System enclosure



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



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



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



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



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



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



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



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



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



Item No.: 850-836
IP65 enclosure; Polyester (RAL 7032); WxHxD (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); WxHxD (200x120x200 mm); without flange plate



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



Item No.: 850-816/002-000
IP65 enclosure; Sheet steel (RAL 7035); WxHxD (400x120x200 mm); without flange plate



Item No.: 850-817/002-000
IP65 enclosure; Sheet steel (RAL 7035); WxHxD (600x120x200 mm); without flange plate