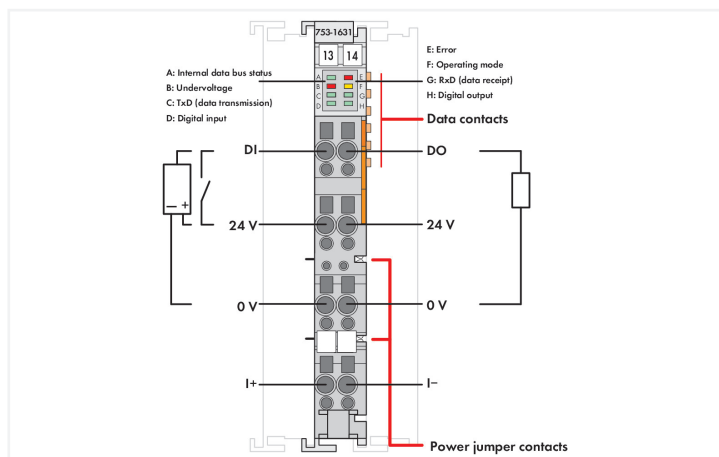
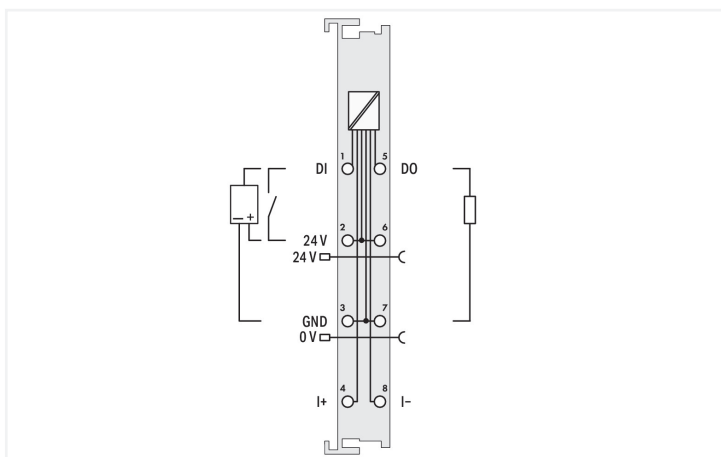
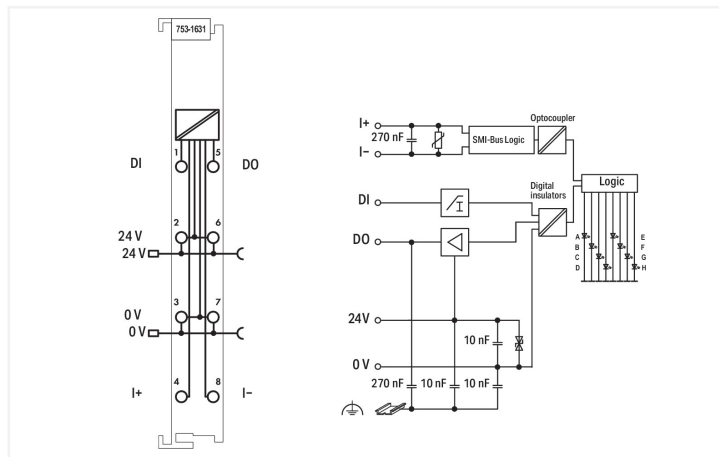


Color: ■ light gray



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.3.0.0.BF and "HMI Hardware Specification" Rev. 2.0 |
| 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 |
| Data width | 12-byte data |
| Commissioning | via WAGO SMI Configurator or IEC libraries |

Technical data

| | |
|--|--|
| Supply voltage (system) | 5 VDC; via data contacts |
| Current consumption (5 V system supply) | 42 mA |
| Supply voltage (field) | 24 VDC (-25 ... +30 %); via power jumper contacts (power supply via blade contact; transmission via spring contact) |
| Current consumption, field supply (module with no external load) | 11.8 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: inputs/outputs | 8 x CAGE CLAMP® |
| Connection type 1 | Inputs/outputs |
| 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 | 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 |

Mechanical data

| | |
|---------------------|-------------|
| Mounting type | DIN-35 rail |
| Pluggable connector | pluggable |

Material data

| | |
|--------------------|------------------------------|
| Color | light gray |
| Housing material | Polycarbonate; polyamide 6.6 |
| Fire load | 1.046 MJ |
| Weight | 54 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 (standing/lying); vertical |
| 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 ₂ S contaminant concentration at a relative humidity 75 % | 10 ppm |
| Permissible SO ₂ contaminant concentration at a relative humidity 75 % | 25 ppm |

Commercial data

| | |
|-----------------------|---------------|
| eCl@ss 10.0 | 27-24-26-08 |
| eCl@ss 9.0 | 27-24-26-08 |
| ETIM 8.0 | EC001604 |
| ETIM 7.0 | EC001604 |
| PU (SPU) | 1 pcs |
| Packaging type | Box |
| Country of origin | DE |
| GTIN | 4055143592307 |
| Customs tariff number | 8538909990 |

Environmental Product Compliance

| | |
|---|---|
| CAS-No. | 1303-86-2 1317-36-8 7439-92-1 75980-60-8 |
| REACH Candidate List Substance | Diboron trioxide Lead Lead monoxide Phosphine oxide, diphenyl(2,4,6-trimethylbenzoyl)- |
| RoHS Compliance Status | Compliant,With Exemption |
| RoHS Exemption | 6(c) 7(a) 7(c)-I 7(c)-II |
| 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 |
| 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 Brjansker Zertifizierungs- stelle | 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-MCM750 |

Declarations of conformity and manufacturer's declarations

| Approval | Standard | Certificate Name |
|---|----------|------------------|
| EU-Declaration of Confor- mity WAGO GmbH & Co. KG | - | - |

Downloads

Environmental Product Compliance

| | | | |
|---|--|--|-------------------|
| Compliance Search | | | |
| Environmental Product Compliance 753-1631 | | | ↓ |

Documentation

| | | | |
|--|-----------------------|-------------------|-------------------|
| Manual | | | |
| Product Manual SMI Master Module; 24 VDC | 3.0.0 11.08.2023 | pdf 5528.93 KB | ↓ |
| Product Manual WAGO SMI Configurator | 1.3.0 11.08.2023 | pdf 2178.45 KB | ↓ |
| System Manual WAGO I/O System 750/753 | V 3.3.3 29.08.2023 | pdf 8512.61 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 | | | ↓ |

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-Konfigurator | 1.74.00.00 11.09.2019 | exe 67636.10 KB | ↓ |
|-----------------------|--------------------------|--------------------|-------------------|

Runtime Software

Firmware

| | | | |
|-----------------------|--------------------|------------------|-------------------|
| 0753-163x, SMI-Master | V 07 01.09.2023 | zip 158.32 KB | ↓ |
|-----------------------|--------------------|------------------|-------------------|

Libraries

e!COCKPIT libraries

| | | | |
|--|-----------------------|-------------------|-------------------|
| e!COCKPIT Library Description WagoAppSMI | 1.1.0.1 23.10.2020 | pdf 1128.97 KB | ↓ |
|--|-----------------------|-------------------|-------------------|

Library

| | | | |
|---|--------------------------|--------------------|-------------------|
| Libraries for Building Automation CODESYS | 2023-09-14 14.09.2023 | zip 44926.41 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.: 210-508

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715; silver-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.: 210-506

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; 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.: 210-504

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715; 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



Item No.: 210-505

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

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

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