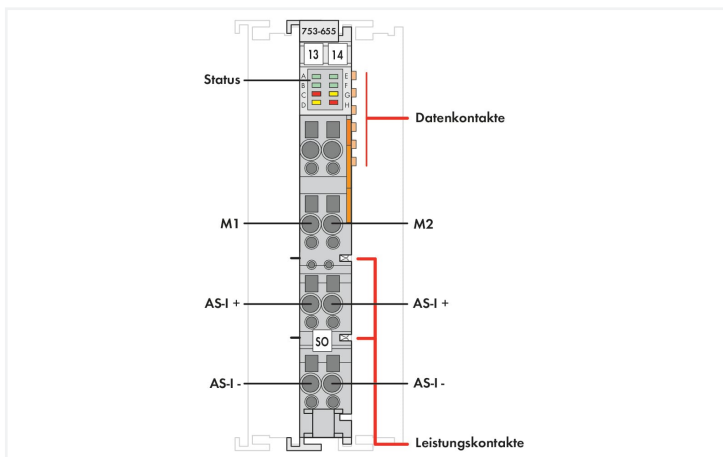
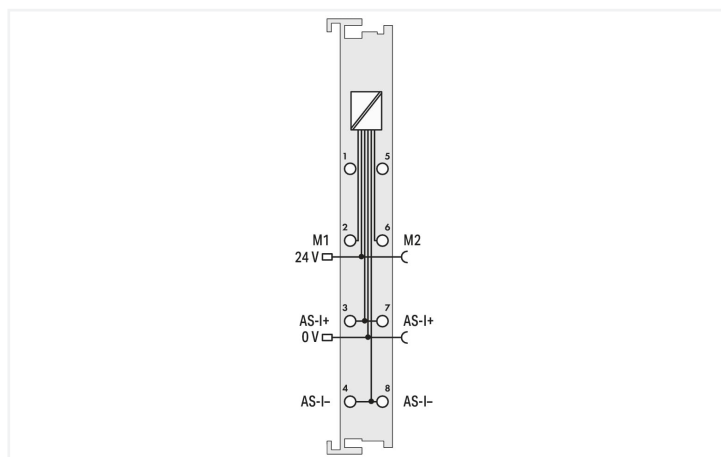
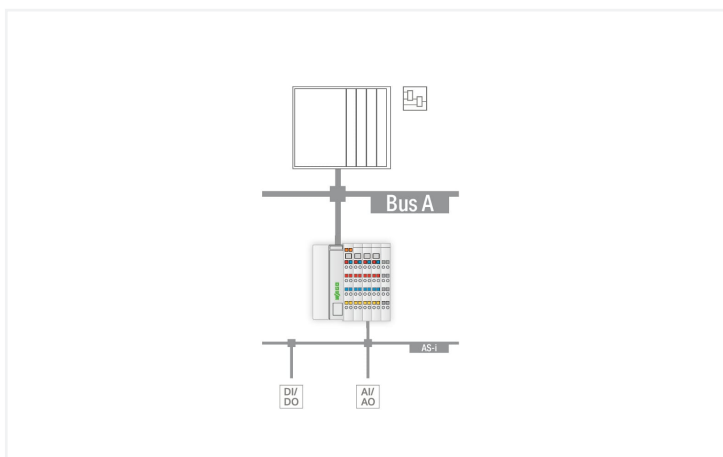
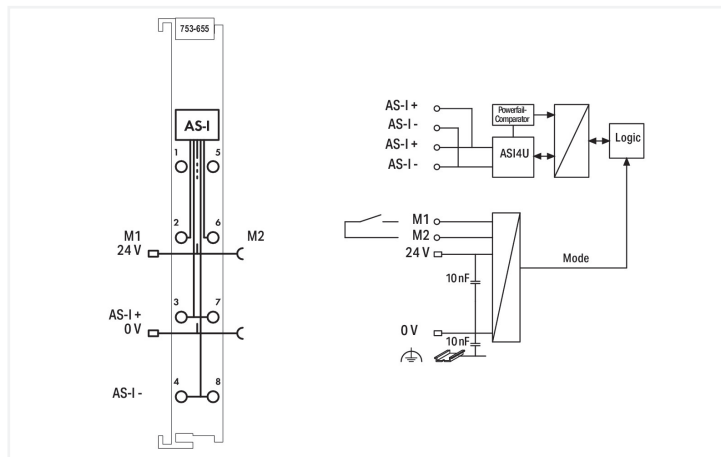


Color: ■ light gray



The 75x-655 AS-I Master connects AS-Interface systems to a higher-level fieldbus.

This module acts as a master for the AS-Interface and as a slave for the fieldbus.

The 75x-655 AS-I Master is a M4 master in accordance with the AS-Interface V3.0 Specification.

This means:

- Up to 62 AS-Interface slaves can be connected per AS-I line
- Analog signal transfer is integrated in the master.
- All slave profiles are supported in compliance with V3.0.
Combined 1–5 transaction types and acyclic write/read services are implemented.
- The AS-I functions are provided both cyclically and acyclically via the fieldbus.
- In cyclic data transfer, up to 32 bytes of I/O data are transferred for the AS-I line binary data. Free cyclic process image areas can be mapped with analog values. Furthermore, analog signals and all other commands and data of the new AS-I specification can be transferred in a management channel via the fieldbus.
- Diagnostics, which go far beyond the AS-I specifications, simplify the detection of both sporadic configuration errors and AS-I communication interferences. An auto-installation mode allows an AS-Interface network to be created via sequential slave installation, with no addressing tool required.
- Both signal transmission and operating status, as well as trouble-free local bus communication, are indicated via LEDs.

Notes

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

Technical data

| | |
|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Device specification | AS-i master class: M4; AS-I Specification: 3.0 |
| Device-specific | AS-I cable length (max.): 100 m, with repeater 300 m |
| Topology | Number of slaves: up to 62; Slave profiles: V3.0 with transaction types 1 ... 5 |
| Current consumption (typ.) | 40 mA (AS-I) |
| Cycle time (AS-I) | 0.3 ... 10 ms, depending on the number of slaves |
| Transmission channel | 1 |
| Data width | 12 ... 48 bytes (max.), configurable, including 1 byte control/status |
| Power supply | AS-I: 26.5 ... 31.6 V |
| Supply voltage (system) | 5 VDC; via data contacts |
| Current consumption (5 V system supply) | 55 mA |
| Supply voltage (field) | 24 VDC (-15 ... +20 %); via power jumper contacts (power supply via blade contact; transmission via spring contact) |
| Isolation | 500 V system/supply/AS-I |
| Indicators | LED (A, B, E, F) green: AS-Interface-Power, Mapping Consistency, AS-Interface active, PRG enable; LED (C, H) red: local bus timeout, general error; LED (D, G) yellow: Overflow, CFG 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 | 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

| | |
|--------------------|------------------------------|
| Color | light gray |
| Housing material | Polycarbonate; polyamide 6.6 |
| Fire load | 0.836 MJ |
| Weight | 46 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 | 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 |
| 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

| | |
|-----------------------|-----------------|
| Product Group | 15 (I/O System) |
| 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 | 4045454641054 |
| Customs tariff number | 85389099990 |

Environmental Product Compliance

| | |
|------------------------|-------------------------|
| RoHS Compliance Status | Compliant, No Exemption |
|------------------------|-------------------------|

Approvals / Certificates

General 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-MSM750 |

Declarations of conformity and manufacturer's declarations

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

Approvals for marine applications



| Approval | Standard | Certificate Name |
|-------------------------------------------------------|-----------------------|-------------------|
| ABS American Bureau of Shipping | - | 22-2219060 |
| BSH Bundesamt fuer Seeschifffahrt und Hydrographie | - | 1104 |
| BV Bureau Veritas S.A. | - | 30389/C0 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/2236/880590/19 |
| RINA RINA Germany GmbH | - | ELE343521XG001 |

Protocol and fieldbus specific certificates



| Approval | Standard | Certificate Name |
|----------------------------------------------|----------|------------------|
| AS-Interface AS-International Association | - | ZU-Nr. 50601 |

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 753-655



Documentation

| Manual | | | |
|---------------------------------------|-----------------------|-------------------|-------------------|
| System Manual WAGO I/O System 750/753 | V 3.3.3 29.08.2023 | pdf 8512.61 KB | ↓ |
| Product Manual AS-Interface Master | V 1.3.0 | pdf 3352.38 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 | | | |
|----------|------------|-----------------|-------------------|
| 753-655 | 16.10.2017 | doc 28.00 KB | ↓ |
| 753-655 | 19.02.2019 | xml 5.10 KB | ↓ |

CAD/CAE-Data

| CAD data | |
|----------------------|-------------------|
| 2D/3D Models 753-655 | ↓ |

| CAE data | |
|---------------------------|-------------------|
| EPLAN Data Portal 753-655 | ↓ |
| WSCAD Universe 753-655 | ↓ |
| ZUKEN Portal 753-655 | ↓ |

Libraries

| e!COCKPIT libraries | | | |
|------------------------------------------|-----------------------|------------------|-------------------|
| e!COCKPIT Library Description WagoAppAsi | 1.7.1.0 21.08.2019 | pdf 554.28 KB | ↓ |

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.: 210-508

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

1.2.2 Marking

1.2.2.1 Group marker carrier



Item No.: 750-107

Group marker carrier

1.2.2.2 Marker



Item No.: 2009-145/000-006

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



Item No.: 2009-145

Mini-WSB In-line; 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 In-line; 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.: 750-602
Power Supply; 24 VDC



Item No.: 753-602
Power Supply; 24 VDC



Item No.: 750-601
Power Supply; 24 VDC; fuse holder



Item No.: 750-610
Power Supply; 24 VDC; fuse holder; Diagnostics

1.2.6 System enclosure

1.2.6.1 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

1.2.6.1 System enclosure



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